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ABSTRACT

These California state guidelines are intended to aid in the planning, monitoring, and improvement of educational programs and services for hearing impaired students. After an introduction, chapters have the following titles and sample subtopics: (1) "Identification and Assessment of Unique Educational Needs" (screening, definitions of hearing impaired, language assessment, manual communication assessment, academic assessment); (2)"Roles and Responsibilities of Providers of Instruction and Services" (special education teacher, regular teacher, parents, interpreters, career/vocational specialist, guidance counselor, adapted physical education specialist); and (3) "Organization and Support for Providing Instruction and Services" (special education and local plan area, curriculum, least restrictive environment, infant programs, attendance area and transportation, program options, aides, audiological services, physical environment, media centers, staff development, parent education). Included in seven appendixes and a glossary is such information as testing standards for the hearing impaired, a draft of certification standards for professionals, recommendations for classroom acoustics, a statewide directory of services, and definitions of terms concerning the hearing impaired. (DB)

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Program Guidelines for Hearing Impaired Individuals

Legal Requirements for Publishing

According to *Education Code* Section 56136, the Superintendent of Public Instruction shall:

> . . . develop guidelines for each low-incidence disability area and provide technical assistance to parents, teachers, and administrators regarding the implementation of the guidelines. The guidelines shall clarify the identification, assessment, planning of, and the provision of specialized services to pupils with low-incidence disabilities. The superintendent shall consider the guidelines when monitoring programs serving pupils with low-incidence disabilities pursuant to Section 56825. The adopted guidelines shall be promulgated for the purpose of establishing recommended guidelines and shall not operate to impose minimum state requirements.

Local educational agencies have the flexibility to provide programs based on local needs, which may of necessity vary from the recommendations in the guidelines, provided that the variance is:

- In compliance with state and federal laws and regulations
- Consistent with the level of quality promoted within these guidelines

Program guidelines, according to *Education Code* Section 33308.5, "shall be designed to serve as a model or example and shall not be prescriptive." These guidelines have been developed cooperatively by teachers, parents, and administrators to serve as a model for providing a quality, cost-effective education to hearing impaired students that includes the requirements of state and federal laws.

Publishing Information

Program Guidelines for Hearing Impaired Individuals was prepared and coordinated by Margo Dronek, Consultant, Special Education Division, with assistance from those listed in the acknowledgments. This publication was edited by Janet Lundin, working in cooperation with Margo Dronek. It was designed and prepared for photo-offset production by the staff of the Bureau of Publications, with the cover and interior design created and prepared by Cheryl Shawver McDonald. Typesetting was done by Anna Boyd, Lea Shimabukuro, and Ron Zacharias.

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Preface

The California State Department of Education, in response to requirements of recent legislation, has provided leadership in the development of guidelines for low-incidence populations. This publication provides guidelines for the planning, monitoring, and improvement of educational programs and services for one of those groups, hearing impaired students.

We are most grateful for the dedication of the committee members, who contributed their expertise to the development of these guidelines. We are also grateful for the valuable assistance and advice of parents, teachers, administrators, and agency and community representatives who reviewed earlier drafts. And we especially acknowledge the commitment of Margo Dronek, Special Education Consultant, who coordinated this effort. We encourage educational personnel to use these guidelines to identify program strengths and areas in need of improvement.

If you have information that could improve the *Guidelines,* we genuinely invite your comments. Please direct your responses to the Special Education Division, California State Department of Education, 601 W. 5th St., Los Angeles, CA 90017.

SHIRLEY THORNTON
Deputy Superintendent;
and Acting Director
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Acknowledgments

The California State Department of Education thanks those persons who contributed to the development of these guidelines.[1] Sincere appreciation is given to Assemblywoman Gwen Moore for sponsoring the legislation to ensure appropriate special education and services for all individuals with low-incidence disabilities.

Because of the contributions from parents, teachers, administrators, and students, this document reflects the point of view of the service providers, as well as that of the recipients of these services. As a result, we believe this document represents the best current thinking and practices regarding programs and services for the hearing impaired.

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[1]The titles of the committee members were current when this publication was developed.

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The Department also thanks the members of the advisory committee who provided invaluable suggestions for revisions in the document during its development.

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Margo Dronek, Special Education Consultant, California State Department of Education, coordinated and supervised the development of this document. She received valuable assistance from other departmental professional and administrative staff, particularly from Allan Simmons, Administrator, Consultant Services South, Special Education Division. Maria Campagna, formerly from the Special Education Division, and staff from the Word Processing Resources Center also made valuable contributions toward the production of this publication.

Introduction

This introduction contains a discussion of the scope and purposes of these guidelines as well as a listing of the standards presented in each chapter. A description of the appendixes also appears.

Scope of the Guidelines

These guidelines serve as a model for meeting the unique educational needs of individuals with a hearing impairment. Essential principles regarding the hearing impaired are that:

- Students with a hearing impairment will, as much as possible, meet standards and expectations established for all students.
- The needs resulting from multiple disabilities are so varied and complex that they should be dealt with on an individual basis through a multidisciplinary approach.

All instruction and services provided to a student with a hearing impairment need to be planned and coordinated to focus on all of the specified needs of the student. Close cooperation and coordination among all agencies, programs, and individuals assessing and providing instruction and services are the keys to meeting these needs successfully. Readers of this publication may wish to contact the Department of Education for technical assistance and publications in these areas.

Purpose of the Guidelines

This document contains recommended guidelines for parents, teachers, administrators, governing boards, support personnel, and interested community representatives to use in identifying, assessing, planning, and providing educational services to hearing impaired children. It is also intended to assist in monitoring programs for these students.

Because educational services for hearing impaired children are governed by mandates established in federal and state laws and regulations, the guidelines in this document were developed to be consistent with these mandates and suggest how the mandates might be carried out.

Standards of the Guidelines

The significant standards for each chapter are stated in the paragraphs that follow. The specific guidelines for meeting the unique needs of the hearing impaired are addressed within each chapter.

Standards in Chapter One

The standards in Chapter One focus on the identification and assessment of unique educational needs resulting from a hearing impairment:

1. Procedures exist for locating and referring individuals with hearing impairments who may require special education.
2. The assessment of students suspected of having hearing impairments includes all areas related to their disabilities.
3. The assessment of hearing impaired students will be conducted by assessment personnel who are knowledgeable about the disability.
4. The assessment report identifies the unique educational needs of the student related to the hearing impairment, including needs for specialized materials and equipment.
5. Tests are provided and administered in the students' primary language or other mode of communication, unless the assessment plan indicates reasons why such provisions and administration are clearly not feasible.

Standards in Chapter Two

The standards in Chapter Two will cover the roles and responsibilities of those providing instruction and services to hearing impaired students:

6. The assessed unique educational needs in the areas related to the disability form the foundation for the individualized education program, the appropriate instruction and services, materials and equipment, and curriculum.
7. The service providers, when providing instruction, services, or consultation to students with hearing impairments, should understand the students' unique educational needs and possess the skills and abilities to carry out their roles and responsibilities in meeting those needs.

Standards in Chapter Three

Standards for administration, organization, and support for providing instruction and services to hearing impaired students follow:

8. Coordination should exist among all of the individuals involved in providing instruction and services.
9. A full range of program options should be available for each hearing impaired individual.
10. Each student with a hearing impairment is to be appropriately placed on the basis of his or her educational needs.
11. Class size and caseloads of staff should allow for providing specialized instruction and services based on the educational needs of students with hearing impairments.
12. Each program is to provide qualified professional and paraprofessional personnel who have the skills and abilities necessary to conduct assessment and to provide instruction and services that meet the educational needs of hearing impaired students.
13. Appropriate staff development and parental education are provided on the basis of a needs assessment that reflects the specialized needs related to a hearing impairment.
14. Facilities should be designed or modified to enhance the provision of instruction and services to meet the unique educational and safety needs of students with hearing impairments.
15. Specialized materials and equipment necessary to meet the unique educational needs of each hearing impaired student are to be provided as indicated on the individualized education program.
16. Transportation of students with hearing impairments is to be appropriate for their unique health, safety, and communication needs.
17. Each program serving students with hearing impairments should have an ongoing process to evaluate its effectiveness in identifying, assessing, planning, and providing instruction and services to meet the unique educational needs of these students.

The guidelines were developed to be consistent with federal and state laws and regulations and to suggest how mandates might be carried out.

Descriptions of the Appendixes

Appendix A contains a self-review guide to assist in improving the effectiveness of local programs in:

- Conducting an internal or external evaluation of the program (The self-review guide contains a series of questions based on standards of quality to assist staff members from local programs in determining the effectiveness of their programs, ranging from highly effective, effective, somewhat effective, to ineffective. This guide should be used to assist the local program's staff in determining priorities for program improvement.)
- Identifying areas and establishing goals for program improvement
- Identifying needs for technical assistance (Once specific needs areas have been determined, state, or local resources, or both, should be contacted. See Appendix G.)

Legal references that appear in Appendix A and that pertain to the education of individuals with low-incidence disabilities may be found in the current *California Special Education Programs: A Composite of Laws,* which is published annually by the California State Department of Education.

Appendix B contains the standards for testing the adequacy of an individual's hearing that appear in Section 2951 of the *California Administrative Code, Title 17, Public Health.*

Appendix C contains the results of a survey among teachers of the hearing impaired and support staff regarding preferred assessment tools and suggested roles of universities and institutions of higher learning.

Appendix D contains the standards of the Council on Education of the Deaf (CED) for certification of professionals involved in educating hearing impaired children and youth. These standards, which were adopted in June, 1985, will be implemented on September 1, 1987. They are considered fundamental for teachers to work effectively with hearing impaired children.

In Appendix E, one finds material from the California Commission on Teacher Credentialing regarding how to obtain the clinical rehabilitative services credential, specialist instruction credentials, and adapted physical education credential. Listings of colleges and universities in California with approved programs in clinical rehabilitative services and in special education also appear.

Appendix F contains recommendations on acoustics in the classroom. A list of references is provided.

Appendix G contains a listing of organizations throughout California that provide services to the hearing impaired.

The glossary contains definitions of terminology used by those working with the hearing impaired.

CHAPTER ONE

Identification and Assessment of Unique Educational Needs

This chapter contains discussions of the identification of hearing impaired students and the assessment of their unique educational needs. The following topics dealing with the identification of the hearing impaired are examined: child find, screening, vision screening and assessment, determination of etiology, and definitions of hearing impaired.

The following aspects of dealing with the assessment of hearing impaired students are discussed: persons conducting the assessment; purposes and procedures of the assessment plan; areas that may be assessed; motor skills assessment; audiological assessment; other types of testing; communication skills assessment; assessments of language and of spoken and manual communication; telephone communication assessment; and academic, preacademic, psychological, and career/vocational assessments.

Identification

Identification is the process of seeking out and locating all hearing impaired individuals from birth through age twenty-one. Research studies have indicated that the earlier a child is identified as having a hearing loss and provided special services and a means of communication, the need for that child to receive special services later on in life will be significantly reduced.

Child-Find System

A child-find system for locating and identifying children who may have a hearing impairment should be established within the community. Available media and special events (e.g., Better Hearing Month) should be used in coordination with the services of the following as part of the educational agencies' identification and referral procedures:

- Educational agencies; e.g., private preschools and child care facilities
- Medical agencies; e.g., hospitals, neonatal intensive care centers, and health centers
- Community agencies; e.g., Family Service Center
- Service organizations
- Appropriate professional persons; e.g., otologists, pediatricians, and audiologists

Screening

Hearing screening is a procedure used to identify groups of children who may require additional assess-

ment to determine whether they have any special needs; e.g., medical treatment or possible special education and services.

The screening tests facilitate identification of suspected hearing loss, but they do not provide an analysis of the type or degree of loss. Screening procedures generally are:

- Administered easily
- Given in a brief amount of time to an entire class or groups of children
- Inclusive of parents' observations and interviews
- Inexpensive
- Indicative of a need for further evaluation

A screening test is not a substitute for a diagnostic assessment. According to state and federal regulations, information alone from a screening test may not be used to determine a child's hearing loss, but the results are used as criteria for a referral for more extensive evaluations.

The following guidelines should be helpful in determining appropriate referrals:

- Screening should not be used for children who are already identified as individuals with exceptional needs.
- The schools must provide the parents or guardians of children who fail the hearing tests with written notification of the test results and recommend that a medical evaluation be obtained. Students who are to be considered for further testing should be considered for further audiological or otological evaluation.
- The school administrator is responsible for developing and implementing procedures to ensure that referrals resulting from school hearing screening are acted on.
- A referral for educational assessment should be initiated when a student's hearing loss has been substantiated (see Appendix B).

Vision Screening and Assessment

Hearing impairment places increased demands on visual functioning. Visual impairments must be detected and treated to assist hearing impaired children in achieving their maximum potential.

Screening procedures of all hearing impaired children should be conducted when they enroll in a school and at appropriate intervals, as required by *Education Code* Section 49455.

The vision screening should include an assessment of:

- Visual acuity, far and near
- Field of vision
- Color vision
- Personal and family ocular history

The schools shall provide the parents or guardians of children who fail vision screening tests with written notification of the test results and recommend that a medical evaluation be obtained.

Parents should be aware that all hearing impaired children should be screened for Usher's syndrome by a physician. This syndrome, which results in deaf-blindness, will have major implications for educational planning.

Determination of Etiology

The etiology for a child's hearing impairment provides information regarding possible needs based on characteristics that may be prevalent. Disease and accidents that cause deafness may often cause other physical impairments, as well as neurological and developmental disorders. Genetic origins may result in an individual's hearing loss or other significant impairments long after birth. The etiology for all children's hearing impairments should be identified when possible.

Parents are advised to seek genetic counseling for a hearing impaired child when no other etiology is identified to determine implications for the child's education and medical treatment and for the parents and child.

Definitions of Hearing Impaired

The hearing impaired student is one whose hearing loss adversely affects his or her developmental growth or educational performance, or both, to such an extent that special education and related services are required. Degrees of hearing impairment are defined in the paragraphs that follow:

Deaf, multihandicapped. Deafness is the primary handicap, but the individual's concomitant impairments are such that his or her needs are more intense,

A primary need of hearing impaired children is a symbol/communication system that allows for social interaction and the sharing of ideas and concepts.

causing severe communication, developmental, social/emotional, and/or educational problems.

Deaf, orthopedically handicapped. Deafness is the primary handicapping condition, but the individual's orthopedic disability affects his or her educational performance. These students are entitled to the same range of services provided to support the hearing orthopedically handicapped.

Deaf-blind. This individual has concomitant hearing and visual impairments, the combination of which causes severe communication, developmental, social/emotional, physical, and educational problems.

Deafness. This hearing impairment is so severe that an individual is impaired in processing linguistic information through hearing, with or without amplification. This condition adversely affects expressive or receptive communication or both, developmental growth, and/or educational performance.

Gifted hearing impaired. This individual is identified as possessing intelligence or creativity or potential capability for high performance in academics, leadership, visual and performing arts, or other categories. These students are entitled to the same services as are provided to the hearing gifted, including specially trained teachers, carefully developed instructional programs, and materials that will challenge these students to develop their advanced capabilities.

Hard of hearing. This hearing impairment, whether permanent or fluctuating, adversely affects an individual's expressive and/or receptive communication, developmental growth, and/or educational performance and makes difficult, but does not preclude, the processing of linguistic information through hearing, with or without amplification.

Severely emotionally disturbed hearing impaired. The individual has a hearing impairment and ". . . exhibits one or more of the following characteristics over a long period of time and to a marked degree, which adversely affects educational performance: (1) an inability to learn which cannot be explained by intellectual, sensory, or health factors; (2) an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (3) inappropriate types of behavior or feelings under normal circumstances . . . ; (4) a general pervasive mood of unhappiness or depression; or (5) a tendency to develop physical symptoms of fears associated with personal or school problems."[1]

Unique Educational Needs

Most hearing children enter public school with the ability to process and integrate verbal information. They have mastered the basic sentence patterns that they will use for the rest of their lives and have acquired an extensive vocabulary. The school system establishes its programs and services for such children and develops a curriculum based on the assumption that all children enter school with basic language skills. The schools then proceed to teach children to read, write, and compute. With these tools children are ready for the acquisition of information in content areas.

Public education in general helps students to reach the goals of self-realization, development of proper human relationships, attainment of economic sufficiency, and assumption of civic responsibility. These are the identical goals in educating hearing impaired children. However, hearing impaired children seldom bring to their educational experience the same extensive language background or the same degree of language skills as do hearing children. The impact of hearing loss on hearing impaired children with hearing parents is indeed profound. These children begin life with an inability to use easily the symbol/communication system of those around them. As they develop, they may not have a vocabulary, a clear knowledge of the significance of words, and an understanding of how to use words in structured sequences that transmit meaning to others. A primary need of hearing impaired children is a symbol/communication system that allows for effective and efficient social interaction and the acquisition and sharing of ideas and concepts. Without such a system, hearing impaired children experience limited learning opportunities and human isolation.

[1] *California Administrative Code, Title 5. Education,* Section 3030(i).

An assessment plan is required to determine what information is already available and what information is needed.

Assessment

In identifying the needs of hearing impaired children, one needs to recognize conditions that affect individual needs, such as etiology, amount of residual hearing, age of onset, first language, cultural and bilingual background, multiplicity of handicaps, communication skills, and intellectual potential. These conditions, individually or in concert, affect the language proficiency a hearing impaired child has or may acquire: to speak, to use sign language, to use residual hearing, to lipread, to analyze and make intelligible his or her experiences, to maximize his or her learning potential, and to be an active participant in his or her environment.

The nature of the disability and the linguistic difficulties experienced by hearing impaired students affect the administration and scoring of most assessment tools and practices. Very few instruments have been standardized on the hearing impaired. Thus, assessors need to decide whether to use a standardized instrument in a nonstandardized situation, to modify standardized instruments developed for hearing populations in order to acquire information, or to use instruments that have been modified and standardized for the deaf population. The use of nonverbal instructions and modifications violates standardized procedures, but the extent to which information is used under these conditions justifies the use of modifications.

Modifications include a different:

- Mode of communication; e.g., use of sign language
- Method of presenting a test; e.g., written, oral, or demonstration
- Way of asking the questions

When standardized tests are considered to be invalid for a specific student, the expected language performance level should be determined by alternative means, as specified in the assessment plan. The effect of the assessment results should be stated in the written assessment report.

Persons Conducting the Assessment

The assessment of hearing impaired students is conducted by persons who are knowledgeable about deafness, skilled in administering the assessment tools, skilled in interpreting the results to ensure nondiscriminatory testing, and have the requisite communication skills. The parent performs a vital role in providing information to the assessment team. Sources of information may include:

- Teacher of the hearing impaired
- Psychologist
- Audiologist
- Language, speech, and hearing specialist
- Parent
- Guidance counselor
- Vocational counselor
- Medical doctor
- Occupational therapist
- Physical therapist
- Adapted physical education specialist
- Counselor
- Nurse

Children below age five need a diagnostician, who may be a teacher; psychologist; or language, speech, and hearing specialist with knowledge about early childhood development and the impact of hearing loss.

The personnel who assess the student prepare a written report or reports, as appropriate, of the results of each assessment. In addition to the requirements of the law, the report includes tests used and results regarding the need for specialized services, materials, and equipment, on the basis of the assessment findings.[2]

Purposes and Procedures of the Assessment Plan

An assessment plan is required to determine what information is already available and what information is needed. The goal of the assessment is to gather valid information about the child in the school or home setting or both. Procedures used in an assessment are:

- Observations
- Parental interviews
- Medical/audiological history
- Gathering of educational information
- Formal assessments
- Informal assessments
- Gathering of other appropriate information

[2]For a list of suggested assessment devices, see Appendix C.

Areas That May Be Assessed

Those making the initial assessment should consider the developmental areas of a hearing impaired student, such as:

- Motor abilities
- Communication skills; e.g., auditory skills, speech, speechreading, vocabulary and analysis of first language, language other than English, language sampling and analysis, sign language skills, and telephone communication skills
- Academic skills
- Psychological development; e.g., intelligence, perceptual and motor skills, social/emotional maturity, developmental skills, visual perception, and adaptive behavior
- Career/vocational plans

Motor Skills Assessment

The development of motor skills may be especially significant for hearing impaired students with etiologies such as meningitis, rubella, and neurologically based deafness—conditions that may result in vestibular damage affecting an individual's equilibrium, body awareness, and visual-motor functioning.

Motor assessment should be conducted by qualified adapted physical education specialists, physicians, or physical therapists. Areas to be assessed may include gross and fine motor skills.

Audiological Assessment

An audiological assessment should provide necessary information regarding appropriate amplification, functional hearing level, and the specifics related to the student's hearing.

Audiological assessment includes the testing and gathering of data in the following areas to include the student's level of hearing under ideal test conditions and under classroom conditions:

- Developmental/medical history
- Acoustic analysis of hearing aids/amplification and ear mold check
- Pure tone air/bone conduction
- Speech detection threshold
- Speech reception threshold
- Speech discrimination
- Impedance test/acoustic reflex
- Test of auditory comprehension
- Unaided versus aided levels

Students who are new to a program should be given an audiological assessment, with specific educational goals developed at these intervals, as shown in the accompanying chart.

Age of student	*Types of tests*	*Suggested testing periods*
Birth through three years	Simple noisemaker screening Pure tone air/bone conduction Brain stem (only if needed) Speech reception threshold Speech discrimination Impedance Aided versus unaided	Every six months
Four through twelve years	Pure tone Bone conduction Speech reception threshold Speech discrimination Impedance Aided versus unaided *Test of Auditory Comprehension*	Once a year
Thirteen through twenty-one years	(same as above)	Every two to three years

Other Types of Testing

Other types of testing are discussed in the paragraphs that follow. These tests are for levels of ambient noise and monitoring of the amplification of both group and individual aids.

Levels of ambient noise in classroom or instructional setting. Levels of ambient noise should be determined and considered by those determining appropriate instructional settings. Checking ambient noise levels is important if there is a change in the acoustic qualities or characteristics of an instructional setting. See Appendix F.

Monitoring of amplification. Both individual and group amplification systems need to be monitored on a regular basis. The classroom teacher needs to conduct daily listening checks on students' individual aids. Both the hearing aid and the batteries need to be checked. An acoustic analysis of the individual aid needs to be conducted at least twice a year or when problems with the aid are identified by means of a listening check.

An electroacoustic analysis system should be used when group amplification systems are monitored. Standards from the American National Standards Institute need to be used by those checking the gain, power, and distortion levels of the group system being analyzed. This analysis should be conducted at least twice a year.

Communication Skills Assessment

Assessment of the communication skills of a hearing impaired student should be conducted by personnel, such as a teacher of the hearing impaired; credentialed language, speech, and hearing specialist; a licensed speech pathologist; or a credentialed and/or licensed audiologist. The examiner should have the appropriate certification, as outlined in Appendix E, and be skilled in identifying specific modalities of the child's communication skills; e.g., English language or American sign language competence or an esoteric language known to those who work with the child. During the assessment, the examiner considers the following variables:

- Age of onset
- Auditory skills
- Academic level and potential
- Amplification status
- Attitude of student
- Age of student
- Expressive and receptive skills; i.e., speech, speechreading, or sign language
- Hearing loss
- Home environment, including home language
- Intelligence of student
- Mastery of English
- Motor skills
- Other handicapping conditions
- Social/emotional development
- Visual skills

The results of the communication assessment should be considered by those developing an individualized education program (IEP) and recommending program placement.

Parental involvement during the assessment process is crucial in obtaining both the quantity and quality of information required to make the best educational and communication decisions for the hearing impaired child. The following factors need to be considered:

- Expectations and potential of parents in fulfilling their role in the program
- Hearing status of family
- Family status:

  Both parents working
  Emotional and psychological needs
  Motivation to learn a communication modality

Language Assessment

Assessment of language competence and performance of the hearing impaired student affects all other areas that are assessed. Formal tests and methods in language assessment are useful clinical tools that can compare the hearing impaired student's performance with a set of norms; however, they are limited and may describe only one facet of language. A comprehensive language assessment of a hearing impaired student should be conducted by a teacher or a specialist who can communicate with the child. This assessment may include the following:

- A description of the child's language of use; e.g., English, or language other than English, Ameri-

Parental involvement during the assessment process is crucial in obtaining both the quantity and quality of information required to make the best decisions for the hearing impaired child.

can Sign Language, Pidgin/esoteric, gestural, homesigns, or emerging English structures:

1. When an assessment plan is being developed, the special language needs of minority hearing impaired students should be recognized. If the home language survey indicates that a student has a primary language other than English, language assessment and procedures to determine a student's proficiency in the primary language should be administered.
2. If the student does not demonstrate evidence of language acquisition, a program should be planned to develop language skills appropriate to the child's environment at school and at home.
3. Whenever a student demonstrates evidence of a primary language usage other than English, consideration should be given to the variables listed under "Communication Skills Assessment" in this chapter that may affect the addressing of the minority hearing impaired student within the IEP process.

- Morphology—To include receptive and expressive abilities in the use of tense, number, and possessive morphemes in the English language
- Syntax—To include receptive and expressive abilities in the use of word order and morphemes to create grammatical English language sentences
- Semantics (concepts and vocabulary)—To include vocabulary mastery, multiple meanings, and basic concepts in the child's language, both receptively and expressively (Semantics may also include situational concepts and contexts.)
- Pragmatics—To include the student's use of language for interpersonal communicative purposes (Assessment may include a description of the student's role-taking skills [sensitivity to the listener]; use of language to have his or her needs met; use of language to influence another's behavior; and use of language to refer to experiences out of immediate context.)

Assessment of Spoken Communication

An assessment of spoken communication for the hearing impaired covers speech, speechreading, and cued speech, a visual analogue of spoken language:

Speech. Assessment of speech production in hearing impaired children includes the testing and gathering of data in the following areas:

- Phonological assessment; e.g., voice, manner, placement, syllabication, stimulability, and reception of speech and speech sounds
- Prosodic features; e.g., intonation, pitch, rhythm, and stress
- Voice quality; e.g., nasality
- Intelligibility of connected speech

Speechreading. The assessment should provide information regarding the speechreading ability of a hearing impaired child. Assessment of skills may include:

- Ability to perceive speech sounds or elements
- Ability to put words and phrases into a meaningful context
- Ability to reorder initial perceptions as meaning becomes evident

Cued speech (a visual analogue of spoken language). The hearing impaired child's performance on the speech, speechreading, and language assessments should determine whether the child needs the added support of cued speech to learn spoken language.

Subsequent evaluations should include the child's response to syllables, words, phrases, and simple sentences delivered through cued speech.

Assessment of Manual Communication

In a program where daily interaction involves manual communication, assessment of students' abilities in manual communication leads to a more effective instructional program. Assessment may include visual and motor capabilities, as well as a description of the language or languages the child uses:

- American Sign Language (ASL)—A natural language employing spatial relationships, facial and body expressions, and fingerspelling
- Manual English/Seeing Essential English/Signing Exact English; and other systems—Conceptualized as manual communication employing English language syntax, with varying decisions as to denotation for morphemic units and sign configuration
- Fingerspelling—Receptive and expressive abilities in the use of 26 distinct hand shapes that

correspond to the 26 letters of the English alphabet (Reference to the Rochester method includes the combined use of fingerspelling and speech.)

At the conclusion of the assessment, the multidisciplinary team (which may include the language, speech, and hearing specialist; teacher of the hearing impaired; program specialist; sign language specialist; and the audiologist) should profile the student's communication skills in terms of receptive and expressive abilities. Instructional planning should include goals and objectives for the development of areas defined by the assessment and should specify the communication mode or modes through which the student can interact most effectively with his or her environment.

Telephone Communication Assessment

Hearing impaired individuals should be assessed in telephone communication skills to determine:

- Ability to use speech/residual hearing, if appropriate
- Ability to use limited coded responses (e.g., yes—no—no—in response to questions requiring yes-no answers) in those incidents where the hearing impaired child can discriminate between one and two syllables
- Ability to use a telecommunication device for the deaf to:

  Interpret properly the significance of various patterns in the line status light; e.g., busy signal, ringing, or possible speech patterns.
  Use operator services.
  Use relay interpreter services.
  Make independently personal, social, and business calls.

Preacademic Assessment

The language difference of the hearing impaired child may be so great as to interfere with attempts to obtain precise and useful assessment data, using standardized methods and materials or tests. For these children an examination of readiness skills may include:

- Visual discrimination skills
- Identification of letters and numbers
- Identification of body parts
- Basic concepts

Academic Assessment

For educational planning, a thorough assessment of the student's currently measurable performance level and the relationship of the handicapping conditions to that level are important.

The assessment data should inform the staff about how the student currently functions and how this assessment compares with his or her nonhandicapped peers in the areas of language, reading, and mathematics skills.

Psychological Assessment

The purpose of a psychological assessment is to collect data that indicate the performance of a student and to make recommendations that will lead to his or her optimal learning and healthy adjustment to living. A student should receive a psychological assessment as part of the initial assessment process and should be reassessed if a specific indication of his or her not progressing exists or if an increase in emotional or behavioral problems occurs. If the student is believed to be gifted or talented, or both, he or she should be referred for a psychological assessment. Those involved in the psychological evaluation process should consider the following background information:

- Student's age at hearing loss—onset and detection
- Type of hearing loss
- Student's age when amplification started and the consistency thereof
- Presence of additional handicaps
- Parents' reactions
- Age of and type of preschool or home educational experiences
- Mode of communication at home and school
- Primary language
- Educational history
- Direct observation and behavioral rating
- Interviews with the child and with parents, instructors, and other care providers in the home and school settings

Assessment personnel may need to consider ongoing evaluation in addition to a psychological assessment if limiting factors such as no formal schooling and cultural differences suggest a need for long-term diagnostic assessment.

Hearing impaired students in secondary schools need an individual career assessment.

The areas of psychological assessment include developmental skills, social/emotional maturity, intelligence, visual perception, and adaptive behavior:

Developmental skills. A developmental assessment, which includes an assessment of a student's family and medical history, should be conducted on hearing impaired infants and multihandicapped deaf students and to obtain information in specific areas on the functioning of any hearing impaired student. Examples of information to be obtained include perceptual and motor skills, language skills, adaptive behavior, and concept development.

Social/emotional maturity. Social/emotional maturity should be a major component of the assessment process for the hearing impaired student. Communication problems that resulted from the hearing impairment contribute toward the development of a child's personality and his or her social/emotional adjustment. Emotional factors have a direct influence on the learning behavior of a hearing impaired child. They may hamper the learning process. Social/emotional evaluations examine a student's:

- Self-image—Including personal adjustment, intrapersonal adjustment, sense of identity, ego strength, dependency, and self-care
- Social or interpersonal adjustment—Including peer relations, familial relations, relation to authority, risk taking, social standards and conformity, value clarification, social isolation, ethical behavior, and so forth
- Emotional adjustment—Including bizarre behavior, fearfulness, insecurity, overconcern, anxiousness, negative attitude, excessive sense of persecution, excessive agressiveness, resistance, anger, suffering, and poor impulse control

Intelligence. A test of intellectual functioning should be conducted at the time of initial assessment if appropriate. Areas evaluated include memory, analogous reasoning, sequencing ability, categorical thinking, practical judgment, visual alertness, concentration ability, spatial reasoning, concept formation, problem solving, visualization, visual rote learning and recall, cognitive association, critical analysis, estimation, and specific skills.

Visual perception. Assessment of visual perceptual skills is of great significance for the hearing impaired student who relies heavily on the visual modality for communication. Early identification of areas of weakness is important. Areas to be evaluated include visual discrimination, visual memory, visual-motor integration, visual figure-ground, visual closure, spatial relations, indications of reversals, simplification, and complications with presented materials.

Adaptive behavior. This type of assessment can be used for very young hearing impaired children or multihandicapped deaf or for specific area assessment for any hearing impaired student. Types of areas evaluated and examples are:

- Independent functioning: self-help feeding, eating, and grooming
- Physical development: walking, balancing, and body movements
- Self-direction: demonstrates initiative, pays attention, and completes tasks
- Socialization: offers assistance and is considerate of others
- Economic activity: uses money, makes change, budgets, and shops
- Vocational activities: performs job skills and takes care of tools
- Independent travel: transports self in the community and knows procedures for traveling by various means of transportation
- Home responsibilities: housecleaning, cooking, and yard care
- Language/communication skills: can write, express self verbally, read and follow instructions, and converse
- Number/time skills: can do simple mathematics operations, tell time, and understand time concepts

Examples of assessment tools most commonly used can be found in Appendix C.

Career/Vocational Assessment

Hearing impaired students in secondary schools need an individual career assessment. Personnel with formal career/vocational assessment training should provide individual assessments, interpret the results, and provide recommendations for development of the individualized educational program.

The Department of Rehabilitation has a statewide network of specially trained rehabilitation counselors

for the deaf (RCDs). Schools may have service agreements with this department for the referral of students sixteen years or older to determine their eligibility and to perform other agreed-on activities for vocational assessments.

Factors that influence the selection of assessment tools are:

- Observations of the student in a variety of settings and interviews with students, teachers, and parents
- Teachers' observations of a student's ability to attend and complete tasks, as well as his or her social behavior
- Students' physical stamina and potential for community employment
- Students' needs and capabilities

Deaf students who read at least at a fourth-grade level and have the potential of community employment may be given an interest inventory, the *California Occupational Preference System (COPS).* For assessment of prerequisite skills or potential of the students to perform in various situations, the *Career Ability Placement Survey (CAPS)* may be administered. To measure physical dexterity, the *Minnesota Rate of Manipulation Test* or the *Purdue Pegboard* may be among those tools used.

Students who read below the fourth-grade level and have the potential for community employment may be administered one or more of the following interest inventories:

- *Picture Interest Exploration Survey (PIES)*
- *Wide Range Interest-Opinion Test (WRIOT)*
- *Pictorial Inventory of Careers (PIC)*
- *California Occupational Preference System (COPS)* (Questions are read to the students.)

Work samples may also be of value in the assessment of hearing impaired students.

Many community colleges and adult vocational training centers may also be used as a resource for assessment and career/vocational information or courses. A number of four-year college and university programs offer career classes for deaf students, including Gallaudet College in Washington, D.C.; the National Technical Institute for the Deaf in Rochester, New York; and California State University, Northridge.

Career/vocational assessment of the multihandicapped deaf student may be done through work samples, observations, and interviews. The following assessment tools may be used:

- *Singer Vocational Evaluation System*
- *Wide Range Interest-Opinion Test (WRIOT)*
- *VALPAR Prevocational Readiness Battery Number 17*
- *Pictorial Inventory of Careers* (This test can be used with the hearing impaired by eliminating the film and asking students to answer yes or no, without rating the occupations on a five-point scale.)

If a sheltered workshop environment is being considered, the *McCarron Dial Work Evaluation System* and the *VALPAR Prevocational Readiness Battery Number 17* may be among the assessment tools used.

When the vocational assessment has been completed, the vocational specialist reviews the testing results, provides information in a written report, and presents the information at an individualized education program (IEP) meeting.

The vocational specialist then has the responsibility to assist the teacher and the staff in implementing the career and vocational components of the individualized education program.

CHAPTER TWO

Roles and Responsibilities of Providers of Instruction and Services

The local educational agency, with the cooperation and participation of parents, has responsibility for ensuring that necessary instruction and services identified in the individualized education program (IEP) are provided to meet the unique educational needs of hearing impaired students. To provide needed services, competent personnel may need to fulfill multiple roles. The roles and responsibilities of those providing services for hearing impaired students are examined in this chapter.

Special Education Teacher (Special Class or Itinerant)

The special education teacher is primarily responsible for the direct instruction of assigned students. Knowledge of and special preparation in the provision of services for hearing impaired children are essential to the implementation and maintenance of a successful program. Special education teachers must be properly credentialed by the Commission on Teacher Credentialing (see Appendix E).

The Council on the Education of the Deaf developed standards for teacher competency, which appear in Appendix D. These competencies may be helpful in selecting and providing in-service training for teachers to work with hearing impaired students.

In addition to providing instruction, the special education teacher should assume the responsibility for the basic coordination of the mainstreamed individual student's program with the regular educational staff and assist the regular teacher, the site principal, and the parents of students in the program.

Typical responsibilities should include, but not be limited to:

- Assisting in the appropriate placement of students
- Monitoring students' progress on a weekly basis
- Coordinating required services for students
- Conducting academic assessment and providing instruction that emphasizes both subject-matter skills and the development of special skills and remediation
- Conducting speech, language, and listening skill assessment, in cooperation with the language, speech, and hearing specialist and the audiologist and providing remediation
- Preparing the regular students for acceptance of hearing impaired students; e.g., specialized communication and attitudes

- Providing daily hearing aid checks
- Providing information to teachers and parents about methods used in communicating with the hearing impaired children and adults
- Providing specialized resource material and visual aids, as appropriate
- Coordinating and assigning notetaker and interpreter services
- Encouraging the hearing impaired student to participate in class

Regular Education Teacher

A regular education teacher who has received a hearing impaired student should be given in-service training prior to the placement of the student in the regular classroom.

In addition to specific in-service training, some additional suggestions for the regular education teacher are as follows:

- Providing for face-to-face visibility between teacher and student during instructional times
- Using resource material and visual aids
- Selecting a "buddy" or work partner for the hearing impaired student
- Creating a comfortable environment of acceptance for the hearing impaired student
- Encouraging the hearing impaired student to participate in class

Resource Specialist

The resource specialist should provide diagnostic evaluations and assist in writing educational goals and objectives that focus on the child's individual needs. This person should be available to provide individual or small-group instruction in the student's identified areas of need.

The resource specialist should have the appropriate competencies to educate hearing impaired children.

Parents

Research studies indicate that parental involvement in the decision-making process and interactions with the hearing impaired child and staff are necessary ingredients if the program is to have positive long-term effects.

Goals for the hearing impaired child will be accomplished if there is a close, compatible, multifaceted working relationship between the staff and family.

The role and responsibility of parents include the following:

- Provide appropriate individual amplification.
- Serve as a resource about the child's functioning at home.
- Provide carry-over experiences in the acquisition of skills.
- Be prepared to provide, as instructed, auditory training experiences, language experiences, and supportive speech reinforcement.
- Learn and use an adjunct communication system if the child requires it for optimum language acquisition.

Hearing Impaired Students

Students are responsible for bringing the following to the learning setting:

- Constructive attitude
- Proper use of time
- Willingness to seek assistance when required
- Appropriate care of auditory equipment and personal aids
- Use of educational materials
- Completion of assigned activities
- Contribution within group activities
- Demonstration of courtesy among students and staff
- Compliance with school rules

Aides

Special education classroom aides, working under the supervision of the special education teacher, are a vital link in the educational program for hearing impaired children. The aide may function in other roles as tutor/interpreter (see "Interpreters") and assist the student in the mastery of skills. Classroom aides must be skilled and demonstrate competencies in order to:

A regular education teacher who has received a hearing impaired student should be given in-service training prior to the placement of the student in the regular classroom.

- Communicate effectively with hearing impaired students at their language level.
- Interpret.
- Assist teaching staff in implementing the educational program.
- Provide tutoring assistance to hearing impaired students.

Notetakers

In classes where hearing impaired students are mainstreamed, they must attend to the teacher or interpreter to understand the instructional material presented. Thus, they are unable to take notes as do their hearing peers. However, with the aid of notetakers (whether paid or volunteer), classroom information can be recorded accurately and in a form conducive for study. Selection of notetakers should be based on criteria such as interest, ability to organize thoughts, and clarity of handwriting. The special education teacher should have the responsibility to provide the necessary training and materials for notetakers.

Interpreters

In classes where hearing impaired students are mainstreamed, they may require the services of oral/aural, sign language, or cued speech interpreters to understand the instructional material presented by the teacher and class discussions involving other students. These interpreters should be skilled in both receptive and expressive aspects of the communication system used, and they may also reverse interpret (provide voice for the student). Particularly critical is the ability of the interpreter to keep pace with the teacher's presentation and class discussions and to reverse interpret so that the hearing impaired student can fully and freely participate in the instructional process.

An interpreter is to be made available to individuals with a hearing impairment when indicated in the individualized education program. This person may provide the following services:

- Interpreters may provide tutoring assistance.
- Interpreters should assist in facilitating communication between the regular class and the hearing impaired student.
- Sign language interpreters may assist in providing sign language or cued speech in-service training for hearing students, teachers, other school personnel, and families of hearing impaired students.
- Hearing impaired students should be provided instruction on how to effectively use an interpreter's services.
- Interpreters should be available at elementary and secondary schools, including extracurricular activities, according to individual need.

Examples of desirable qualifications for an interpreter are as follows:

- Registry of Interpreters of the Deaf (RID) certification
- Participation in the Educational Interpreter Training Program
- Proficiency and previous experience
- Completion of the California civil service examination for support services assistant (interpreter)

Psychologist Working with the Deaf

A state-credentialed school psychologist working with hearing impaired students, their families, and teachers should be:

- Knowledgeable in the psychological and sociological aspects of deafness
- Trained and prepared to assess cultural and linguistic factors related to hearing impairments and the implications on performance output
- Competent in manual and/or oral communication skills necessary for developing a counselor-client relationship and for administering assessment batteries in the student's primary language
- Skilled in making the necessary adaptations for assessing hearing impaired students
- Knowledgeable in the selection and use of assessment instruments appropriate for hearing impaired students

The primary role of the psychologist working with the hearing impaired is to administer individual tests of intellectual or social/emotional functioning, or both, and to develop preventive and remedial mental hygiene programs for students, families, and teachers.

The guidance counselor working with hearing impaired students should place strong emphasis on parental guidance for developing a positive emotional climate.

When such a psychologist is not available within the district, the SELPA should arrange for a psychologist with these qualifications to participate in the assessment or refer the student to the assessment centers of the California School for the Deaf.

Audiologist

The audiologist's reports and services are an integral part of the educational program for a student with a hearing loss.

An audiologist with appropriate competencies has responsibilities that include, but are not limited to:

- Coordinating or providing aural rehabilitation and habilitation with individual students or groups and support for the hearing impaired students in the regular classroom
- Monitoring hearing levels, auditory behavior, and amplification for all students requiring personal or group amplification in the instructional setting
- Planning, organizing, and implementing an audiological program for individuals with auditory dysfunctions, as specified in the individualized education program
- Providing consultative services to staff and parents regarding test findings, amplification needs and equipment, otological referrals, home training programs in auditory skill development, acoustic treatment of rooms, and coordination of audiological services to hearing impaired individuals

An audiologist must hold a valid credential with a specialization in clinical or rehabilitative services in audiology or hold a California License in Audiology.

The audiologist's role should not be in conflict with the responsibilities of the teacher of the hearing impaired or the language, speech, and hearing specialist. A team approach by the audiologist and teacher of the hearing impaired, as well as other appropriate personnel, is most desirable.

Language, Speech, and Hearing Specialist

Credentialed language, speech, and hearing specialists (see Appendix E) with appropriate competencies to work with the hearing impaired should provide diagnostic, habilitative, and consultative services for students with an identified hearing loss when the need is determined by the individualized education program (IEP) team and services are specified in the IEP.

A language, speech, and hearing specialist is expected to:

- Provide identification, screening, and initial assessment in the areas of speech, language, and hearing.
- Participate as a member of the IEP team when appropriate.
- Provide scheduled specialized language, speech, and hearing services to hearing impaired students with assessed needs.
- Provide ongoing assessment and evaluation procedures as appropriate.
- Provide consultative services to students, parents, teachers, or other school staff.
- Demonstrate knowledge related to deafness or sensory handicaps.
- Demonstrate effective communication techniques with the hearing impaired.
- Show competence in making necessary test adaptations for the hearing impaired student and documenting how materials and procedures were adapted in the assessment.

School Nurse

The school nurse should have the competencies required for the nurse's position, as indicated by the requirements for a state credential.

The school nurse's specialized responsibilities include the ability to do the following:

- Demonstrate effective communication techniques with hearing impaired students either directly or with an interpreter.
- Establish procedures for screening hearing, vision, and etiology.
- Serve as an instructional resource to staff with regard to health education of hearing impaired students.
- Serve as a resource to the staff with regard to community resources for health and welfare services for hearing impaired students.

Career/Vocational Specialist

The career/vocational specialist should develop and enhance programs that will provide preparatory experiences for hearing impaired students.

The career/vocational specialist should be able to:

- Demonstrate effective communication techniques with deaf students.
- Design and implement a programwide career education program within the structure of the existing curriculum as follows: career exposure for preschool through grade three, career awareness for grades four through eight, career exploration for grades nine through twelve, career identification for grades nine through twelve, career work groups for grades nine through twelve, and specific occupational interests and skills.
- Conduct individual career assessment.
- Utilize career assessment plan results.
- Interpret assessment results.
- Assist classroom teachers with the assessment of career awareness, interests, and aptitudes.
- Assist classroom teachers with making use of results from career assessments at various levels.
- Identify and obtain career education materials for use in the classroom.
- Identify and obtain materials for staff in-service training.
- Establish a career education resource center.
- Coordinate job training facilities for classroom training and on-the-job training.
- Coordinate job sites for students' observation and on-the-job training.
- Provide outreach service to the community.

Learning Disability Specialist

Many of the causes of deafness (e.g., rubella, premature birth, meningitis, or complications of RH factor) also result in specific learning disabilities. To help these learning disabled children achieve at a level commensurate with their intellectual potential, trained professionals with competencies in both learning disabilities and deaf education should coordinate their efforts.

The teacher of students who are both learning disabled and hearing impaired can provide:

- A diagnostic-prescriptive program
- Assessment in the child's primary language
- Knowledge and experience in the field of deaf education
- Methods and techniques for the learning disabled child

Guidance Counselor

The primary role of the credentialed guidance counselor working with hearing impaired students is to provide preventive and remedial mental hygiene programs to students, families, and teachers. In this way coping skills, problem-solving abilities, and positive self-concepts in hearing impaired students are developed.

A state-credentialed guidance counselor working with hearing impaired students, their families, and teachers should be:

- Knowledgeable in the psychological and sociological aspects of deafness and the implications for family dynamics
- Knowledgeable about postsecondary programs for the hearing impaired
- Competent in manual or oral communication skills, or both, necessary for developing an effective counselor-client relationship
- Knowledgeable about services available for the hearing impaired at community, city, state, and national levels
- Knowledgeable about counseling philosophies and theories and their application with hearing impaired clientele
- Aware of and willing to interact with the deaf community

The guidance couselor working with hearing impaired students should place strong emphasis on parental guidance for developing a positive emotional climate for the hearing impaired student through the encouragement of communication or interaction between parents and their children.

A guidance counselor should work with hearing impaired students and their families through referrals by teachers, parents, administrators, and students.

The counseling evaluation process should include:

- Referral review and acquisition of pertinent background information
- Direct observation, behavioral rating, or a conference with the student, parent, and teacher
- Identification of the problem or problems
- Development of a guidance plan to include guidance activities, such as individual or group therapy, discussions, guest speakers, work experience, and so forth
- Home/school conference as necessary
- Follow-up on recommendations

The comprehensive evaluation of the social/emotional functioning of a hearing impaired student should include, as appropriate, an analysis of:

- Personal adjustment; e.g., self-concept or intrapersonal adjustment—to include value clarification
- Interpersonal adjustment; e.g., peer relations, family relations, relation to authority, or risk taking
- Motivation and initiative

This evaluation may be provided by the psychologist and, if current, used by the guidance counselor.

Adapted Physical Education Specialist

Qualified adapted physical education specialists should provide diagnostic, rehabilitative, instructional, and consultative services for physical fitness, gross and fine motor development, and corrective instruction. They should also provide instruction in the use of supplementary devices that facilitate physical education skills. Services are provided to hearing impaired students when the need is determined by the IEP team and services are specified in the IEP.

An adapted physical education specialist is expected to:

- Identify, screen, and initially assess the student in the areas given previously.
- Participate as a member of the IEP team when appropriate.
- Provide scheduled specialized instruction and services to hearing impaired students who are precluded from any other physical education activities.
- Provide and implement gross motor assessment.
- Provide consultative services to students, parents, teachers, or other school staff.
- Enhance the student's social and emotional growth through physical education activities.
- Demonstrate knowledge in aspects related to deafness or sensory handicaps.
- Demonstrate an ability to communicate with hearing impaired students.
- Show competence in making necessary test adaptations for the hearing impaired student and providing documentation if interpreters were used or materials and procedures were adapted in the assessment.

CHAPTER THREE

Organization and Support for Providing Instruction and Services

This chapter presents a discussion of a full service program for the hearing impaired. The following aspects of this program are examined: the special education local plan area (SELPA); the responsibilities of the school board, the superintendent, the program coordinator/supervisor, the program specialist, and the site administrator; and the curriculum.

Also included in this chapter is a description of the least restrictive environment and the continuum of services—infant to secondary programs. The following components of the continuum of services are examined: infant programs, preschool programs, minimum essentials for infant/preschool programs, elementary and secondary programs, attendance area and transportation, and services and program options.

The following services and program options are discussed: home programs, regular class with modifications, itinerant teachers, resource specialist program, special classes and centers, state special schools, nonpublic schools and agencies, and the state hospital program.

Also discussed in the section on the continuum of services are aides, suggested equipment for audiological services, physical environment, media centers, extracurricular activities, staff development, parental education, coordination and provision of parental education, and progam evaluation.

Full Service Program

A full service program provides all educational activities and related services as required by a pupil's individualized education program in an environment that promotes a student's healthy interaction with peers and social and emotional growth.

The following items constitute a full service program:

- Appropriately credentialed teachers of the hearing impaired
- Ancillary personnel who are appropriately trained to provide diagnostic and remedial services
- Complete assessment capabilities
- A psychologist knowledgeable about the deaf
- A program specialist knowledgeable about the deaf
- Coordination and supervision by a specialist in deaf education
- Evaluation of the program and personnel by a specialist in education of the deaf

The provision of a full service program requires planning and coordination of educational services and programs to meet the unique needs of a low-incidence group that spans a wide age range.

- Infant program with a family-centered approach
- Preschool program
- Elementary program that allows for homogeneous grouping
- Secondary program that ensures a range of curricular opportunities taught by appropriately credentialed teachers of the hearing impaired
- Comprehensive curriculum
- Appropriate facilities
- Guidance counseling
- After-school programs
- Deaf role models
- Comprehensive staff development
- Parental education program
- Opportunity for hearing students to participate in sign language instruction

The provision of a full service program requires planning and coordination of educational services and programs to meet the unique needs of a low-incidence group that spans a wide age range. For example, some hearing impaired students may be successfully mainstreamed into the regular program with support services, yet there will always be a segment of the hearing impaired student population that will need the specialized instructional techniques of the certificated teacher of the hearing impaired within a special class.

At the elementary level, consideration must be given to homogeneous groupings to ensure appropriate age and grade ranges. Therefore, one special class located at an elementary site may adequately provide for the hearing impaired student who will be mainstreamed for most of the day into the regular class. However, for the hearing impaired students who will remain in the special class for most of the day, consideration must be given to their ages, mental abilities, social and academic levels, and other factors that constitute an appropriate environment.

At the secondary level, the provision of a full service program is even more complex than at the elementary level. The number of students required to support a comprehensive secondary program is generally found in heavily populated areas. In addition to the core curriculum, specialized courses unique to the hearing impaired, as well as specialized instructional techniques that address linguistic structures should be available. In a small program, meeting the unique needs of hearing impaired students on an individualized basis is difficult.

The organization of a program for hearing impaired students requires a substantial population base to support a full service program.

New programs should be planned and existing programs modified so that instruction and services necessary to meet the unique needs of hearing impaired students are available. A sufficient number of special classes to ensure homogeneous groupings can be provided through coordinated administrative services on a regional basis.[1] These classes should also provide for appropriate materials and equipment and reasonable allowances for learning time and traveling distance. Providing the needed instruction and services in an efficient and cost-effective manner to a population large enough to constitute a full service program may require staff from the special education local plan areas (SELPAs) to cooperate with neighboring SELPAs or to refer to the California state schools for the deaf.

Special Education Local Plan Area (SELPA)

When developing a local plan at the SELPA level, one should give special consideration to the needs of hearing impaired students attending programs within the SELPA. The need for appropriate class sizes, specialized services, materials, equipment, and other personnel requirements related to operating a program for the hearing impaired must be considered and provided to ensure the appropriateness of programs for the hearing impaired.

School Board and Superintendent

School boards develop policies for implementation by the local administration. When developing policies, the school board should have responsibility for being familiar with guidelines or standards regarding programs for the hearing impaired.

Superintendents are charged with responsibility for implementing the adopted policies of the board and

[1]The results of a statewide study by the California State Deapartment of Education in 1970, which were corroborated by the Conference of Educational Administrators Serving the Deaf in 1973, determined that an elementary program should have a minimum of six classes and that a secondary program (grades seven through twelve) should have a minimum of 12 special teachers.

for ensuring that federal and state laws and regulations are followed. Familiarity with the guidelines contained in this publication will assist a superintendent to ensure that good program practices are known and implemented. The implementing of the guidelines within a district would also assist a superintendent in being assured that legal rules and regulations are being followed.

Program Coordinator/Supervisor

A program for the hearing impaired should have the services of a coordinator/supervisor who has had at least three years of successful teaching experience with hearing impaired students. This person should hold the appropriate California credential to teach the hearing impaired and the appropriate credential authorizing supervision and/or administration.

Those who are employing and assigning a supervisor should consider the following: number of teachers of the hearing impaired, travel distance, number of sites, number of classes, amount of time for evaluation of teachers, and composition of the program.

The coordinator/supervisor has a variety of responsibilities that may include:

- Developing and implementing identification/screening procedures for hearing impaired students or students suspected of having a hearing impairment
- Ensuring that appropriate assessment procedures and personnel are used in the assessment of hearing impaired students
- Coordinating appropriate personnel to provide direct and indirect services to hearing impaired students; e.g., speech and language specialist, adapted physical education specialist, audiologist, interpreter, notetaker, and so forth
- Providing specialized training to parents, administrators, teachers, support staff, or aides regarding the unique needs of hearing impaired students
- Ensuring that a full continuum of services, program options, and specialized equipment and material is available to hearing impaired students
- Providing supervision of staff members assigned to the hearing impaired program to ensure that appropriate curriculum and instruction are being provided to hearing impaired students
- Having the role of advocate for programs for the hearing impaired (See Appendix G.)

Program Specialist

The program specialist should have the training and experience to teach the hearing impaired. When the program specialist serves in a dual role as program supervisor and program specialist, this person has responsibilities for evaluating both curriculum and staff. The competencies for the coordinator/supervisor should apply.

The program specialist has a variety of responsibilities that include:

- Classroom observation
- Consultation with teachers, special class teachers, parents, and administrators
- Assistance in program planning and placement
- Coordination of curriculum by assisting teachers with regular and modified courses of study
- Assessment of program needs
- In-service education
- Coordination of specialized equipment and materials

Site Administrator

If the site administrator has professional certification in the area of the hearing impaired, he or she should assume those responsibilities previously stated for the program coordinator/supervisor.

However, if the site administrator has little background or expertise in the area of the hearing impaired, he or she should follow the guidelines for the hearing impaired contained in this publication. Consultation should be provided by the program supervisor, who will assist the principal with some practical applications for the guidelines. Since the site administrator is often the direct supervisor, evaluator, and implementor of administrative policies, it is critical that practical, rather than theoretical, knowledge be obtained and implemented. The program supervisor should provide technical assistance to the site principal to assist in the role of supervisor, evaluator, and implementor. Technical assistance includes classroom observations and recommendations regarding teachers' evaluations.

Curriculum

The instructional delivery system for hearing impaired students, including special education services, should support students' learning of the district's core curriculum. The course of study includes language arts, mathematics, social science, science, physical education, and computer literacy. In addition, specialized studies should be provided, such as communication skills (for example, speech, sign language, and use of telephone and TDD), specialized career/vocational education, independent living skills, and deaf studies.

The curriculum should be well defined, sequential, and coordinated with all other service providers. During the IEP meeting, curriculum adaptations and instructional procedures should be discussed to ensure coordination of the student's course of study.

Least Restrictive Environment

No one environment can meet the needs of all hearing impaired students. The degree of hearing loss, age of onset of the hearing loss, and the variety of assessed educational needs of the student will have an impact on the selection of the environment that is the least restrictive for the individual student. The environment should optimize opportunities for communication and for social, emotional, and academic growth and development of the hearing impaired student.

Another consideration for least restrictive environment is district enrollment, which has a major impact on regular and special education programs. As populations increase or decrease, local districts are forced to consider school program changes. Students enrolled in classes and services for the hearing impaired need continuity of peer-group interactions with both regular and hearing impaired students to promote social and emotional growth. When a program is considered for expansion or closure, every consideration should be given to maintain programs, with little change to composition of the student population.

Continuum of Services—Infant to Secondary Programs

The hearing impaired are a low-incidence group of children with hearing losses that range from mild to profound. Those with hearing losses considered mild usually do not require the same type of educational programs as do those who are severely to profoundly hearing impaired. The needs of hearing impaired children vary greatly from one individual to another and require a variety of program options to meet the broad range of differences. Although most hearing impaired children need to be educated in classes with other hearing impaired children, some of them are able to function successfully in the regular classroom with related services, which may vary from one child to another. The individualized education program should identify those students who can perform successfully in the regular classroom with the use of designated instruction and services.

The severity of the handicap imposed by a severe to profound hearing loss requires that services to children with such a loss begin after the initial identification of the problem. An infant-level program (ages birth through three) should be designed as a home-based parent program or home-center based program, or both, to provide guidance and assistance to the family and the hearing impaired child. As the child is able to participate in a more structured classroom environment, he or she may be moved in that direction.

Personnel working with these families should have the necessary competencies to work with hearing impaired individuals, and the teacher should have additional training in early childhood education. This program can be carried out by the school district or SELPA when there are sufficient numbers of individuals with hearing impairments to employ appropriately trained personnel. The California state schools for the deaf should provide a parent orientation program for children residing in less populated areas.

Infant Programs

An infant program may be provided for hearing impaired infants. Special education services for infants should provide a developmental program that encourages active family involvement and assists in enhancing the learning environment at home and at school.

The program should be a combination of home-based and center-based services with a family-centered approach. Home visits should be consistent, with frequency based on the family's needs, and should include:

Special education services support a hearing impaired student's learning of the core curriculum.

- Observing the child and developing parent/child interaction
- Modeling and demonstrating ways to use tasks and routine interactions to create optimal speech and language experiences
- Interacting with the family to exchange information
- Assisting parents in becoming self-sufficient and strong advocates for their hearing impaired child
- Providing emotional support throughout the process of understanding and coping with the ongoing needs of the hearing impaired child

Preschool Programs

A preschool-level program (for children from ages three to four years, nine months) is required for all hearing impaired children with intensive needs. This program should be an in-school program, unless the child is unable to tolerate a classroom setting at this time. Professional personnel working with this child should have the appropriate competencies and additional training in early childhood education.

Minimum Essentials for Infant/Preschool Programs

A well-defined program model and philosophy for infant/preschool hearing impaired children should include:

- Comprehensive assessment and/or services for children from birth to five years of age
- Multidisciplinary team approach for assessment and individualized education program development
- Program options to provide the least restrictive environment, including opportunities for interaction with hearing peers
- Emphasis on parental involvement
- Interagency coordination
- Parental education
- Provision of opportunities for observing and for conducting training
- Involvement with hearing impaired role models
- Administrative support and participation for in-service training
- Alternatives for communication

Since the parents are the primary language models, a consistent approach to language development should be used. Communication alternatives need to be identified and parents given the opportunity to research, explore, and decide what system would best meet the needs of the child. This decision should be supported by the professionals involved.

Elementary and Secondary Programs

The needs of students at the elementary and secondary levels whose individualized education programs indicate that a special class for the hearing impaired is needed require the consideration of additional factors.

Students. Hearing impaired students with a severe to profound loss require special education programs designed to meet their unique communication and educational needs.

Those placing students with severe to profound losses should consider the following criteria to ensure homogeneous groupings in classes:

- Chronological age
  - No greater age range than two years in a class at the elementary level
  - No greater age range than three years in a secondary class
- Mental ability
- Academic achievement
- Language level
- Social skills

Class sizes and caseloads. Class sizes for programs or caseloads for itinerant teachers should be kept at levels that facilitate effective teaching and learning. These criteria for students should be considered: language ability, degree of hearing loss, maturity and age differences, need for individualized instruction, academic level, other handicapping conditions, emotional level, number of students mainstreamed, and amount of time. One should consider the amount of time for consulting with classroom teachers, other service providers, and parents; traveling of itinerant teachers; obtaining and preparing specialized materials, media, and equipment; attending meetings, preparing reports, and recordkeeping; and receiving assistance from aides. (The local agency may use specially trained aides under the direct supervision of the teacher of the hearing impaired to provide flexibility to the suggested range of students in a special class.)

A full range of services, including in-class and after-class activities, should be made available to hearing impaired individuals.

The following class sizes have been developed based on information from a number of programs throughout the nation and represent suggestions for a range of students in a special class where qualified aides are employed:

- Infant—Four students per class if school based
- Preschool—Four to six students per class
- Multihandicapped—Four to six students per class
- Elementary (ages five to nine)—Four to eight students per class
- Elementary (ages nine up)—Six to eight students per class
- Secondary—Eight to ten students per class

Local class sizes may fall above or below these ranges on the basis of the criteria for students previously stated.

Attendance Area and Transportation

The size of the geographic area served by a program should be determined by the accessibility of the schools in which the program for the hearing impaired is maintained.

Transportation within a reasonable time and distance should be arranged as suitable to the well-being and safety of the student. A hearing impaired child should not be required to spend more than one hour in travel time from home to school or from school to home. The bus driver or responsible adult should be able to communicate with the students on the bus.

Sevices and Program Options

A full range of continuum of services, including in-class and after-class activities, should be made available to hearing impaired individuals.

The selection of a particular program option is determined by the unique needs of hearing impaired children. The role of the individualized education program team is to make the final decision regarding the placement of an individual in a program and to determine the related services necessary to meet the identified needs of the individual.

The range of services or programs for a hearing impaired individual is presented as follows.

Home programs. A discussion of home programs appears under "Infant Programs."

Regular class with modifications. Students may need special materials, equipment, seating, and/or services. Factors to consider for this option include the following:

- The regular class enrollment allows the teacher an opportunity to devote some of his or her time to assist the hearing impaired student to meet classroom requirements.
- The student uses the receptive and expressive skills of communication—speechreading, speech, language, reading, and writing—sufficiently well to function successfully in the regular class program.
- The student's social and emotional maturity levels are within the averages of the students in the regular class.
- The student directs his or her attention to the assigned work and follows the directions he or she is given for doing the work.
- The achievement level of the student is at the approximate level of the regular class in which he or she is enrolled.
- The teacher of the regular class is informed regarding the problems faced by a student as a result of his or her hearing impairment and is willing and prepared to employ instructional practices and procedures that should be helpful to the student.
- The student's confidence in his or her ability to function successfully in a regular class and the determination to do so are sufficient.
- The hearing impaired student is seated in the regular classroom so that he or she has a good view of the teacher's face when instruction is being given and of the students' faces when they are speaking.
- Amplification will be provided if the student can profit from its use.
- The students in the regular class accept the hearing impaired student as a member of the class and give him or her the same consideration they give to each other.
- Qualified interpreters are available to interpret classes and extracurricular activities in which the student will participate.
- Notetakers are available as indicated in the individualized education program.

Itinerant teachers. Itinerant teachers may be needed for students enrolled in a regular class, a resource specialist program, special class, home or hospital program, or designated instruction and services. Students who require specialized instruction may benefit from the resources of itinerant teachers of the hearing impaired who are certified as outlined in Appendix E. Factors to consider for this option include:

- Other handicapping conditions
- Degree of hearing loss
- Language level comparable to placement considered
- Social skills comparable to placement considered
- Ability to work independently
- Average or better academic level
- Ability to follow directions

Resource specialist program (RSP). If a hearing impaired student is enrolled in a regular class and requires limited specialized instruction, individually or in small groups, he or she may benefit from a resource specialist program. Ongoing consultation services from a special education teacher with competencies and certification to teach hearing impaired students must be provided to the RSP. Direct services to the student may also be provided by an itinerant teacher of the hearing impaired or appropriate designated instructional services personnel, or both; e.g., audiologist. Additional factors to consider appear in the sections "Itinerant Teachers" and "Regular Class with Modifications."

Special classes. Students with needs of intensive specialized services in communication, social, and academic skills are enrolled in a special class for part or all of the school day. Instruction that emphasizes concept development, language acquisition, and basic skills is provided by a teacher or teachers of the hearing impaired in coordination with other appropriate specialists. Some students may benefit by participating in regular classes in selected academic subject areas or nonacademic areas, or both, as appropriate. Factors to consider for this option include:

- Other handicapping conditions
- Late discovery of hearing loss
- Degree of hearing loss
- Need for intensive specialized services in communication, academic, and social skills
- Need for individual pacing of academic program

State special schools. Students should be considered for enrollment in one of the state schools that serve the hearing impaired student or multihandicapped hearing impaired student, or both, when local school districts or SELPAs do not have enough students to provide a full service program or when the needs of the student require specialized instruction and support service beyond that which can reasonably be provided in the local school programs. (See "Full Sevice Program" in this chapter.) Factors to consider for this option include the following:

- When appropriate services are unable to be reasonably provided in the local plan area
- When the incidence of students is too small to provide a comprehensive service program
- When excessive travel time or distance is required for the student to receive services (See "Transportation" in this chapter.)
- When the age of the student is not within the age range of students in the local program
- When the home environment needs additional support

Nonpublic schools and agencies. Nonpublic schools and agencies may be a program option when a public agency cannot meet a student's needs. Information about credentials and competencies of the staff appears in Appendix E.

State hospital program. The state hospital program option is for hearing impaired students with developmental disabilities or mental disorders that preclude their proper treatment or education in their home community.

Factors to consider for this option include:

- Other residential programs unable to provide the appropriate treatment
- Degree of developmental disability or mental disorder and severe to profound hearing impairment
- Need for a long-term residential placement on a 24-hour basis
- Availability of a continuum of services appropriate for individuals with hearing impairments

A full range of activities is necessary to promote the social and emotional as well as the intellectual development of hearing impaired children.

Placement is recommended by an individualized education program team; and subsequently, the student is placed by the regional center, the California State Department of Mental Health, or by court order.

Aides

Aides should be provided for students in resource specialist programs, special class programs, and regular class programs when indicated by the individualized education program. Aides should have the ability to communicate effectively with hearing impaired students. The wide range of levels necessitates a variety of duties to be discharged. Duties may include assistance with personal needs and specialized equipment, teaching, and student supervision.

Suggested Equipment for Audiological Services

A program for the hearing impaired has access to the following suggested equipment for use by staff and students:

- Equipment for audiological services for the school program:
  - Electroacoustic test chamber with hearing aid analyzer
  - Audiometer, clinical with speech and air/bone conduction capabilities (has tape deck, phonograph, speakers, and so forth)
  - Portable impedance bridge (a tympanometer that tests the condition of the middle ear)
  - Otoscope for examination of outer ear
  - Sound level meter
  - Equipment for testing young or difficult to test children; e.g., reinforcement lights, toys, and so forth
  - Ear mold equipment (making and modifying)
  - Stock of loaner aids
  - Appropriate test materials and visual aids for in-service training
  - Appropriate files and forms for recordkeeping
- Audiological equipment for classroom area:
  - Group amplification (FM system)—for use on ear-level aids if appropriate
  - Tape recorders, language masters, phonographs (plus software), or piano
  - Access to space with appropriate equipment for auditory training and appropriate signal to noise ratio
  - Telecommunications devices for the deaf (TDD)
  - Appropriate auditory training materials
  - Battery testers, stethoscopes, and ear mold cleaning materials

Physical Environment

The physical facilities in programs for the hearing impaired should include those facilities required for both indoor and outdoor instruction, ancillary services, and administration. The facilities should be sufficiently flexible to permit changes in the program that are dictated by the students' needs or by new developments in the provision of instruction to the hearing impaired. Classrooms should be large enough to accommodate individual or small-group instruction as well as the use and storage of the necessary special equipment and teaching materials. Special attention should be given to the aspects of the environment for the hearing impaired described in the paragraphs that follow.

Color. Because of the importance of sensory clues, the visual environment should be warm, varied, cheerful, and restful to the eyes. Color that will provide contrasting background for ease in lipreading and reading sign language is essential.

Acoustics. Because individual hearing aids or auditory training equipment is used by the hearing impaired, special consideration should be given to the control and reduction of ambient noise and intrusive sound from fluorescent light ballasts, mechanical equipment, outside noises, and so forth. Carpeting and acoustical tile will permit the best use of audiological devices. Generally, self-contained classrooms are better than open classrooms. For further information, see Appendix F.

Lighting. Because hearing impaired students must use their eyes more extensively in the educational setting, nonglare lighting is important. Lighting should be easily modified and controlled. Easy access to control switches is an important time-saver.

Emergency warning and signaling services. Because hearing impaired students do not always hear fire alarms, bells, or verbal commands, signaling devices

are necessary to alert the deaf child about emergencies. Each classroom should be equipped with strobe lights or other electrical devices, or both, that can be used to obtain the attention of the students.

Teaching equipment. Teachers use multimedia equipment regularly in their instructional activities. Because a teacher usually faces students to communicate, efficient and accessible control projectors and other equipment are necessary.

The following kinds of equipment were suggested in a survey of those working with the hearing impaired:

- Tape recorder that can be connected with a group hearing aid
- Turntable for recordings that can be connected with a group hearing aid
- Film projector (8mm)
- Filmstrip projector
- Slide projector
- Filmstrip and slide viewers
- Tape recorder
- Language master
- Educational television receiver with caption decoder
- Film projector (16mm) for each five teaching stations
- Opaque projector for each ten teaching stations
- Overhead projector

Media Centers

A media center to supply needed equipment, films, and materials to use in the classroom can be a centralized facility within a program's geographical area. The center should be located within a distance so that needed equipment, films, and materials can be obtained without undue delay. The media center may contain the following suggested equipment:

- Large-print typewriters
- Infrared-type photocopier for production of black and white overhead transparencies
- Ultraviolet-type copier for production of colored overhead transparencies and overlays
- Dry mounting press for mounting and/or laminating two-dimensional flat pictures and production of overhead transparencies by the photo-lift method
- Single or double frame 35mm camera with copy stand for production of simple filmstrips or 2 x 2-inch (5 x 5 cm) slides
- Additional still cameras, including Polaroid (may be loaned to faculty and students)
- Motion picture cameras (8mm)—regular and super 8 (may be loaned to faculty and students)
- Drawing board or table for layout and lettering on transparency masters, filmstrip captions, or posters; to be equipped with basic drawing instruments: T square, triangles, and lettering devices
- Duplicating equipment as needed
- Educational television production equipment
- Overhead projectors
- Opaque projectors
- Film projectors (8 mm and 16mm)
- Tachistoscope
- Tape recorders
- Turntables for recordings
- Computers
- Individual viewers for filmstrips and slides
- Videotape recorder (compatible with other schools in the state or region)
- Educational television receivers
- Microfilm or microfiche readerprinters
- Captioned decoders
- Access to captioned films
- Telecommunications devices for the deaf (TDD)

Extracurricular Activities

The curriculum offered by a program for hearing impaired children provides a full range of activities, including after-class as well as class activities. This range of offerings is necessary to promote the social and emotional as well as the intellectual development of hearing impaired children.

Hearing impaired children need the same quality of educational opportunity as do hearing children, including both curricular and extracurricular activities.

Special consideration to permit hearing impaired students access to the full range of a school program includes providing:

- Transportation for those students involved in extracurricular activities
- Interpreters so that hearing impaired students can be involved in extracurricular activities

Parents are in the unique position of being naturally motivating and reinforcing to their own child.

Staff Development

A program for hearing impaired students has a well-developed program of staff development for all personnel working with the hearing impaired child. On an annual basis, a needs assessment should be made of the needs of the staff, and staff development activities should be built around this needs assessment. Depending on the needs of the program and the staff, program planners should provide opportunities for in-service training, preservice training, and specialized workshops and conferences.

Parent Education

The involvement of the hearing impaired child's family as active participants rather than as passive spectators is critical to the success of the child and of the program as a whole. Research studies have shown that children make greater progress and maintain those gains when parents provide language experiences for their child at home rather than relying solely on the instruction the child receives in his or her educational program.

Parents are in the unique position of being naturally motivating and reinforcing to their own child. They are the only ones who have access to daily experiences that promote language as they stimulate, respond to, interact with, and teach their child.

Effective parent participation is critical because:

- Parents have responsibility for their child much longer than the teacher.
- Parents have knowledge about their child that can enhance the teacher's ability to provide motivation and develop skills that the child needs to participate in the home environment.
- The home provides varied experiences that facilitate language generalizations.
- Reinforcement in the home accelerates the child's learning rate.

Because parents play such a pivotal role in their child's total development, the intervention strategies must be designed for parents as they interact with their children within the family routine. The teacher provides the background information and practical experiences in using and expanding these daily tasks and interactions. Parents need to capitalize on these natural opportunities to help the hearing impaired child reach his or her language potential and adapt to the hearing loss.

Parent education and support programs can help parents develop both the confidence and competence to carry out effective interactions and learning activities at home.

The staff of a program can use several modes to help parents learn new skills and develop attitudes that will enhance their child's potential for learning and success. Some people prefer learning on a one-to-one basis; others enjoy group discussion, and others benefit most from a hands-on method. Most people learn best from a combination of approaches.

Parent education and training opportunities need to be provided in three main modes:

- Parent education meetings
- Written information
- Hands-on training of observation and teaching skills

Coordination and Provision of Parent Education

Because parental involvement and knowledge are critical to the growth and development of the hearing impaired student, a need exists for coordination and provision of parent education. Services to parents can be divided into four major areas: social/emotional support, exchange of information, promotion of parent participation, and improvement or extension of interactions between parents and students. The general goal for service to parents is self-sufficiency in promoting what is best for their child.

The person responsible for coordination and provision of parent education:

- Conducts a parent needs/strengths assessment
- Arranges for informational programs according to parents' priorities
- Provides resource personnel for educational programs
- Organizes support groups to meet emotional needs
- Obtains written material on topics of parental interest or need
- Acts as a public relations person to make the community aware of the identification and implication of hearing impairments
- Develops or expands a parent library or resource center

The responsibilities listed previously may be assumed by the program coordinator/supervisor, the program specialist, the guidance counselor, or other personnel as deemed appropriate. It is desirable for one person to assume the responsibility of facilitating parent education.

Program Evaluation

An evaluation component should be designed to provide information about the effectiveness of the delivery of services to the hearing impaired. Those knowledgeable about hearing impairment, as well as other areas being evaluated, should conduct the evaluation.

Evaluation of program effectiveness is measured by:

- Progress of students
- Testing of students
- Surveys of parents
- Feedback from parents
- Attainment of goals of the individualized education program
- Review by community advisory committee
- Evaluations conducted by supervisors
- Informal assessment of students
- Follow-up studies of graduating students
- Coordinated compliance review
- Feedback from students
- Evaluation of teachers
- Observation
- Success of graduates
- Program specialists

The evaluation process should encompass all of the areas outlined in this document, using the standards for each chapter and the "Self-review Guide" in Appendix A as the basis for the evaluation. When a self-review is being conducted, questions should be developed for interviewing administrators, special and regular education staff, and parents and for reviewing students' records and other documentation.

These guidelines are to be considered when programs serving hearing impaired students are reviewed by the State Department of Education. The Department is to provide technical assistance to parents, teachers, and administrators in the implementation of these guidelines. For further information, one may contact the Special Education Division of the California State Department of Education.

APPENDIX A

Self-review Guide

This self-review guide contains criteria for evaluating the program components discussed in the three preceding chapters. To indicate the status of a criterion, program reviewers should place a check mark in the appropriate column under the heading "Status."

Chapter One—The Identification and Assessment of Educational Needs

Criteria	*Status*				*Comments*
	4[a]	*3*[b]	*2*[c]	*1*[d]	
How effective is your program in each of the following areas?					
I. Procedures for identification and referral of hearing impaired individuals:					
A. Providing a child-find system that is established and coordinated with other agencies?					
B. Screening of all students for hearing loss?					
C. Screening of all hearing impaired students for vision problems?					
D. Documenting the etiology of the hearing impairment when possible?					
E. Providing referral for assessment?					
II. Using modifications when testing:					
A. Different mode of communication?					
B. Different method of presenting the test?					
C. Questions asked at the child's level of communication?					
III. Ensuring that the assessment team includes:					
A. A teacher of the hearing impaired?					
B. Psychologist?					
C. Audiologist?					
D. Speech and language specialist?					
E. A diagnostician with knowledge about early childhood development and the impact of hearing loss for children below age three?					
F. Others as appropriate?					
IV. Considering the variables that affect a student's unique educational needs when hearing impaired students are assessed, such as:					
A. Etiology?					
B. Age of onset?					

[a]4 = Highly effective—This program's exemplary practices may serve as a model for other programs.
[b]3 = Effective—This program's current practices are satisfactory in meeting laws, regulations, and the spirit of the law.
[c]2 = Somewhat effective—This program needs improvement.
[d]1 = Ineffective—This program needs change and the development of strategies to bring about the necessary changes.

The Identification and Assessment of Educational Needs—Continued

Criteria	*Status*[1] 4	3	2	1	*Comments*
C. Degree of hearing loss?					
D. Home environment?					
E. Other handicapping conditions?					
F. Communication?					
G. Amplification status?					
V. Preparing a written report of the results of each assessment that includes:					
A. Identification of unique needs of the hearing impaired student?					
B. Needs for specialized educational services, materials, and equipment?					
VI. Assessing students with hearing impairments in the following areas:					
A. Assessing motor skills:					
1. Gross motor?					
2. Fine motor?					
B. Assessing auditory skills:					
1. Gathering of data?					
2. Meeting suggested testing periods?					
3. Testing:					
a. Measurement of a student's hearing?					
b. Ambient noise in the classroom or instructional setting?					
c. Monitoring of amplification?					
d. Checking individual aids and group aids?					
C. Assessing communication skills, including the identification of the specific modalities of the child's communication?					
D. Assessing language, including:					
1. Child's language of use?					
2. Morphology?					
3. Syntax?					
4. Semantics?					
5. Pragmatics?					
E. Assessing speech:					
1. Phonological assessment?					
2. Prosodic features?					
3. Nasality?					
4. Voice quality?					
5. Intelligibility of connected speech?					
F. Assessing speechreading, including:					
1. Ability to perceive speech sounds or elements?					
2. Ability to put words or phrases into a meaningful context?					
3. Ability to reorder initial perceptions as meaning becomes evident?					
G. Assessing cued speech communication, including:					
1. Assessing receptive cued levels of speech skills?					
2. Assessing expressive cued speech skills?					

[1]Status: 4 = Highly effective, 3 = Effective, 2 = Somewhat effective, 1 = Ineffective. See the footnotes on page 28 for further explanation of these ratings.

The Identification and Assessment of Educational Needs—Continued

Criteria	Status[1] 4	3	2	1	Comments
H. Assessing manual communication skills, including:					
1. Visual and motor capabilities?					
2. The language(s) the child uses?					
I. Assessing preacademic skills, including:					
1. Visual documentation skills?					
2. Identification of letters and numbers?					
3. Identification of parts of the body?					
4. Basic concepts?					
J. Assessing academic skills, including:					
1. Language?					
2. Mathematics?					
3. Reading?					
K. Assessing psychological processes, including:					
1. Developmental?					
2. Intelligence?					
3. Social/emotional maturity?					
4. Visual perception?					
5. Adaptive behavior?					
L. Assessing career/vocational needs, including:					
1. Work samples?					
2. Observation?					
3. Interview?					
4. Interest?					
5. Dexterity?					

Chapter Two—Roles and Responsibilities of Providers of Instruction and Services

Criteria	Status[1] 4	3	2	1	Comments
How effective is your program in each of the following areas?					
I. Ensuring that the following service providers understand the unique needs of the hearing impaired and possess the skills to carry out their roles and responsibilities:					
A. Special education teacher?					
B. Regular education teacher?					
C. Resource specialist?					
D. Parents?					
E. Aides?					
F. Notetakers?					
G. Interpreters?					
H. Psychologist?					
I. Audiologist?					
J. Language, speech, and hearing specialist?					
K. School nurse?					
L. Career/vocational specialist?					

[1]Status: 4 = Highly effective, 3 = Effective, 2 = Somewhat effective, 1 = Ineffective. See the footnotes on page 28 for further explanation of these ratings.

Roles and Responsibilities of Providers of Instruction and Services—Continued

Criteria	*Status*[1] 4	3	2	1	*Comments*
M. Learning disability specialist?					
N. Guidance counselor?					
O. Adapted physical education specialist?					
II. Providing appropriate instruction and services, including:					
A. Individualized and group instruction?					
B. Audiological?					
C. Communication?					
D. Psychological?					
E. Counseling?					
F. Speech and language?					
G. Career/vocational?					
H. Interpreting?					
I. Notetaking?					
J. Physical education?					
K. Parental education?					
L. Other as appropriate?					

Chapter Three—Organization and Support for Providing Instruction and Services

Criteria	*Status*[1] 4	3	2	1	*Comments*
How effective is your program in each of the following areas?					
I. Ensuring the delivery of appropriate instruction and services through a full range of program options provided, as necessary, on a regional basis:					
A. Providing programs based on local need?					
B. Coordinating services with neighboring SELPAs, when necessary, to provide a program sufficiently large in size and scope?					
C. Ensuring that administrative roles and responsibilities are understood by:					
1. The SELPA?					
2. The board of trustees?					
3. The program coordinator/supervisor?					
4. The program specialist?					
5. The site administrator?					
6. Other staff?					
II. Ensuring that students are placed in the least restrictive environment that:					
A. Optimizes one's communication, social, emotional, and academic growth?					
B. Provides a variety of options designed to meet differing needs most appropriately?					

[1]Status: 4 = Highly effective, 3 = Effective, 2 = Somewhat effective, 1 = Ineffective. See the footnotes on page 28 for further explanation of these ratings.

Organization and Support for Providing Instruction and Services—Continued

Criteria	*Status*[1] 4	3	2	1	*Comments*
III. Providing the following program options, when needed, through regionalization:					
A. Infant?					
B. Preschool?					
C. Elementary and secondary?					
D. Regular class with modification?					
E. Itinerant teacher?					
F. Resource specialist program?					
G. Special classes and centers?					
H. State special schools?					
I. Nonpublic schools and agencies?					
J. Home and hospital instruction?					
IV. Ensuring that class size and caseloads are based on needs of hearing impaired students by:					
A. Providing for homogeneous groupings?					
B. Developing a process for establishing caseloads that are based on:					
1. Language ability?					
2. Maturity/age differences?					
3. Need for individualized instruction?					
4. Academic level?					
5. Other handicapping conditions?					
6. Emotional level?					
7. Number of students mainstreamed?					
8. Amount of time? (See the items for this criterion on page 21.)					
V. Providing the following qualified professional and paraprofessional personnel who have the certification and competencies as necessary to conduct assessments and provide instruction and services which meet the educational needs of students:					
A. Teachers of the hearing impaired?					
B. Supervisor/coordinator?					
C. Program specialist?					
D. Assessment personnel?					
E. Other professionial staff as needed?					
F. Noncertificated staff:					
1. Interpreters?					
2. Notetakers?					
3. Aides?					
VI. Providing transportation for hearing impaired students by:					
A. Considering reasonable time and distance?					
B. Considering safety and well-being of student?					

[1]Status: 4 = Highly effective, 3 = Effective, 2 = Somewhat effective, 1 = Ineffective. See the footnotes on page 28 for further explanation of these ratings.

Organization and Support for Providing Instruction and Services—Continued

Criteria	*Status*[1] 4	3	2	1	*Comments*
C. Determining whether the driver effectively communicates with the students on the bus?					
VII. Providing appropriate curriculum, materials, and equipment necessary to meet the unique educational needs of students as specified in the individualized education program?					
A. Ensuring that hearing impaired students are learning the core curriculum					
B. Providing the specialized studies to support a student's learning of the core curriculum					
1. Communication skills (speech, sign language, and use of telephone and TDD)					
2. Specialized career/vocational education					
3. Independent living skills					
4. Deaf studies					
VIII. Designing and modifying facilities to enhance the provision of instruction and services to meet the unique needs of hearing impaired students in the following areas:					
A. Color?					
B. Acoustics?					
C. Lighting?					
D. Warning and signaling services?					
E. Teaching equipment for classrooms?					
F. Media centers?					
IX. Providing opportunities for extracurricular activities?					
X. Providing staff development based on a needs assessment?					
XI. Providing parent education based on a needs assessment?					
A. Personnel responsible for parent education?					
B. Services to parents:					
1. Social/emotional support?					
2. Exchange of information?					
3. Promotion of parent participation?					
4. Improvement or interactions between parents and students?					
XII. Establishing a process to evaluate the effectiveness of programs in meeting the needs of hearing impaired students by:					
A. Identifying areas of need and suggestions for improvement?					
B. Identifying areas of strength?					
C. Assessing success of program graduates?					
D. Identifying needs for technical assistance?					
E. Coordinating with monitoring by the State Department of Education?					

[1]Status: 4 = Highly effective, 3 = Effective, 2 = Somewhat effective, 1 = Ineffective. See the footnotes on page 28 for further explanation of these ratings.

APPENDIX B

Testing Standards for Hearing Impaired

This appendix contains the standards for testing the adequacy of an individual's hearing that appear in Section 2951 of the *California Administrative Code, Title 17, Public Health.*

Health and Safety Code Section 1685

Pursuant to *Health and Safety Code* Section 1685, the following standards are determined necessary to ensure the adequacy of hearing testing in the schools:

(a) Pure tone audiometers used for testing of hearing shall meet or exceed the current specifications of the American National Standards Institute (ANSI).

(b) Audiometric testing personnel shall maintain continuous surveillance of the instruments used and shall have all audiometers serviced and calibrated at least once a year.

(c) For screening purposes, the adequacy of the testing environment may be determined by qualified audiometric testing personnel. To ensure test validity and reliability, air conduction threshold tests shall be conducted in an environment which does not cause a threshold shift greater than ten decibels at those frequencies which must be included in a pure tone air conduction threshold test.

(d) Each pupil shall be given a screening test in kindergarten or first grade and in second, fifth, eighth, and tenth or eleventh grades. Each pupil enrolled in classes for the physically handicapped, educationally handicapped, special education programs, or ungraded classes shall be given hearing tests when enrolled in the program and every third year thereafter.

(e) Pure tone audiometric screening tests, either group or individual, shall be conducted at a level not to exceed 25 decibels and shall include the frequencies 1,000, 2,000, and 4,000 Hz.[1] Failure to respond to any of the required frequencies at the screening level constitutes a failure of the screening test.

(f) Pure tone air conduction threshold tests shall include the frequencies 250, 500, 1,000, 2,000, and 4,000 Hz. and shall be given to:

(1) all pupils who fail the screening tests;

(2) all pupils who are to be considered for further audiological or otological evaluation.

(g) The schools shall provide the parents or guardians of children who fail the hearing tests with a written notification of the test results and recommend that a medical evaluation be obtained whenever the test demonstrates:

(1) a hearing level of 30 decibels or greater for two or more frequencies in an ear at 250, 500, 1,000, 2,000, or 4,000 Hz. or a hearing level of 40 decibels or greater of any *one* of the frequencies tested, 250 through 4,000 Hz., on two threshold tests completed at an interval of at least two weeks, or

(2) there is evidence of pathology; e.g., an infection of the outer ear, chronic drainage or a chronic earache.

(h) Dates and the results of all screening tests shall be recorded on each pupil's health record. Copies of all threshold tests shall be filed with the pupil's health record and the cumulative record folder.

[1] Hz. is the abbreviation for *hertz*, a unit of frequency equal to one cycle per second.

APPENDIX C

Responses to the Survey for Guidelines for the Hearing Impaired

A recently conducted survey revealed the assessment tools and the suggested roles of universities and institutions of higher learning most preferred by support staff and teachers of the hearing impaired. The responses to the survey appear in this appendix.

Assessment Tools

The assessment tools that appear in this appendix are grouped according to the following educational needs of the hearing impaired: academic, audiological, fine motor, gross motor, intelligence, language, social/emotional, speech, visual perception, and vocational.

Academic

Brigance Diagnostic Inventory of Basic Skills
Comprehensive Tests of Basic Skills (series)
Gates-MacGinitie Reading Tests (series)
Key Math Diagnostic Arithmetic Test
MacMillan Reader Placement Test
Michigan Test of Aural Comprehension
Peabody Individual Achievement Test (PIAT)
Structure of Intellect Learning Abilities Test
Sucher-Allred Reading Placement Inventory
Survey of Academic Skills, Grade Eight
Survey of Basic Skills, Grades Three, Six, and Twelve
Wide Range Achievement Test
Woodcock-Johnson Psycho-Educational Battery
Woodcock Reading Mastery Tests

Audiological

Test of Auditory Comprehension
Visual-Aural Digit Span Test

Fine Motor

Bender-Gestalt Test (series)
Brigance Diagnostic Inventory of Basic Skills
Bruininks-Oseretsky Test of Motor Proficiency
Developmental Test of Visual Motor Integration
Frostig Movement Skills Test Battery
Leavell Hand-Eye Coordinator Tests

Gross Motor

Aahperd Youth Fitness Test
Bayley Scales of Infant Development
Bender-Gestalt Test (series)
Brigance Diagnostic Inventory of Basic Skills
Denver Developmental Screening Test (for infants)
Lincoln Oseretsky Motor Development Scale
Quick Neurological Screening Test-Revised Edition

Intelligence

Bayley Scales of Infant Development
Developmental Profile II
Hiskey-Nebraska Test of Learning Aptitude
Leiter International Performance Scale
Progressive Matrices
Smith-Johnson Nonverbal Performance Scale
Wechsler Intelligence Scale for Children-Revised
Wechsler Intelligence Scales for Children-Revised: For the Deaf

Language

Assessment of Children's Language Comprehension
Boehm Test of Basic Concepts
Brigance Diagnostic Inventory of Basic Skills
Carrow Elicited Language Inventory
Detroit Tests of Learning Aptitude
Illinois Test of Psycholinguistic Abilities (ITPA) Revised Edition
Northwestern Syntax Screening Test
Peabody Individual Achievement Test (PIAT)
Peabody Picture Vocabulary Test-Revised
Stanford Diagnostic Arithmetic Test
Stanford Diagnostic Mathematics Test
Stanford Diagnostic Reading Test
Test of Auditory Comprehension
Woodcock-Johnson Psycho-Educational Battery

Social/Emotional

Bayley Scales of Infant Development
Bender-Gestalt Test (series)
Burks' Behavior Rating Scales
Devereux Child Behavior Rating Scale
Draw-a-Person
Make a Picture Story
Michigan Test of Aural Comprehension
Vineland Social Maturity Scale

Speech

Arizona Articulation Proficiency Scale: Revised
Brigance Diagnostic Inventory of Basic Skills
Goldman-Fristoe Test of Articulation
Weiss Comprehensive Articulation Test

Visual Perception

Bender-Visual Motor Gestalt Test
Brigance Diagnostic Inventory of Basic Skills
Detroit Tests of Learning Aptitude
Developmental Test of Visual-Motor Integration
Frostig Developmental Test of Visual Perception
Memory-for-Designs
Motor-Free Visual Perception Test
Purdue Perceptual-Motor Survey
Slingerland Screening Tests for Identifying Children with Specific Language Disability
Visual-Aural Digit Span Test

Vocational

Bender-Gestalt Test (series)
Brigance Diagnostic Inventory of Basic Skills
Developmental Test of Visual-Motor Integration
Singer Vocational Evaluation System
Valpar Prevocational Readiness Battery Number 17
Wechsler Intelligence Scale for Children-Revised (WISC-R)
Wide Range Interest and Opinion Test-Revised (WRIOT)

Suggested Roles for Universities and Institutions of Higher Learning

Since state and local educational agencies are the consumers of the research and training conducted by universities and institutions of higher learning, a need exists for increased communication between these institutions and agencies. These institutions may improve the level of service for the hearing impaired by providing the following:

- Teacher training in a variety of program options
- Supervised field work
- Updates in curriculum
- In-service training
- Research and dissemination
- Speech and hearing clinics
- Training of interpreters
- Training in speech teaching techniques for teachers of the hearing impaired
- Facilitation of communication through advisory committees
- Involvement of field people with university personnel in developing course content
- Courses in new techniques
- Sign skills for teachers in training
- Parental education classes
- Consultant services
- Provision of resources
- More hands-on experiences for teacher candidates

APPENDIX D

Certification Standards for Professionals

(A Draft)

This appendix contains sections from the final draft of the new standards of the Council on Education of the Deaf (CED). These standards are for certification of professionals involved in educating hearing impaired children and youth. Special competencies and knowledge in core areas which are considered fundamental for teachers to work effectively with hearing impaired children are required. Adopted in 1985, these standards are to be implemented on September 1, 1987.

The Council on Education of the Deaf (CED) is a national organization that serves the three major groups of educators and professional personnel involved in the education of hearing-impaired children and youth in the United States and Canada. CED is responsible for setting certification standards and certifying those professionals who meet the certification requirements. The CED Executive Board consists of representatives from the three member organizations—Alexander Graham Bell Association for the Deaf (AGBAD), Conference of Educational Administrators Serving the Deaf (CEASD), and Convention of American Instructors of the Deaf (CAID).

Certification standards for professionals have existed since 1939. These standards apply to professional preparation programs and to the knowledge and competencies needed by professionals working with hearing-impaired individuals. The certification program, originally begun by CEASD, is open to all educators and other professionals who work with hearing-impaired children.

This document is a revision of the standards set in 1972. These standards do not endorse any one method, combination of methods, or particular philosophy of teaching as being superior or more productive than another. They are merely the minimal requirements considered essential for preparing individuals to enter and work in the field. They also serve as guidelines for upgrading professional competencies.

Each CED-certified professional working with hearing-impaired individuals must demonstrate specific competencies that will enable him or her to provide appropriate educational services in at least one special area. This implies a general knowledge of educational problems in all hearing-impaired individuals from infancy through adulthood. The provisional certification system outlines competencies needed in the areas of specialization in addition to necessary general knowledge of the field.

The standards include the knowledge and competencies needed by teachers and other professional personnel who work with hearing-impaired children and adults: supervisors of instruction and psychologists.

7.0 COMPETENCIES FOR PROVISIONAL CERTIFICATION OF ACADEMIC TEACHERS

In order for teachers to work effectively with hearing-impaired children, they must possess knowledge and skills in several core areas. The development and evaluation of these skills and knowledge is the responsibility of approved teacher preparation centers. The following outline contains the basic areas of knowledge and the competencies within those areas required for provisional certification.

7.1 Foundations of Education of the Hearing Impaired

7.1.1 Historical and current developments in education of the hearing impaired in the United States and other countries and the influence of historical developments upon the current state of the field.

7.1.2 National and local issues, trends, and events that influence the education of hearing-impaired children.

7.1.3 The purposes and services of national, state, and local organizations and government agencies concerned with the education and welfare of the hearing impaired.

7.1.4 National, regional, and local education programs for the hearing impaired; the variety of educational settings and service delivery models; and the role and responsibilities of personnel in the various settings.

7.1.5 The status of hearing-impaired people in today's society and their specific needs in the affective domain.

7.1.6 Implication of hearing impairment for the psychological, sociological, vocational, and educational development of hearing-impaired individuals; and the range of support services available for use in educational planning.

7.1.7 Techniques for responding to questions, problems, and issues as described by parents of hearing-impaired children.

7.1.8 Methods for giving basic guidance and providing a support system for referrals for additional assistance needed by parents.

7.1.9 Content and nature, issues, and trends of fields and professions related to education of the hearing impaired, such as regular education, special education, audiology, and educational psychology; and the contributions of these fields to education of the hearing impaired.

7.1.10 Methods for locating and utilizing resources, reference materials, and professional literature in the education of the hearing impaired and in related fields.

7.2 Speech Science and Audiology

7.2.1 Speech Science

7.2.1(a) Human speech, auditory, and visual mechanisms and related brain and central nervous system structures; anatomy of these mechanisms, their interrelatedness, common pathologies affecting these mechanisms, and the functioning of these mechanisms in communicative and other types of behavior in both intact and defective organisms.

7.2.1(b) Production, transmission, and reception of speech sounds and other sounds; physical and psychophysical characteristics of sound; and methods of displaying and graphically representing these characteristics.

7.2.1(c) General and specific effects of hearing impairment upon the

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production of speech and the reception of speech and other sounds.

7.2.2 Audiology

7.2.2(a) Various procedures for testing hearing and interpreting hearing test results.

7.2.2(b) Characteristics of various types of amplification equipment and their application to learning and instructional processes.

7.3 Language and Communication

7.3.1 Language

7.3.1(a) The structure of the English language (linguistics), the acquisition and use of language (psycholinguistics), and the implications of these areas for education of hearing-impaired infants, children, and young adults.

7.3.1(b) Research and other literature on language of the hearing impaired.

7.3.1(c) Acquisition and development of language in hearing and hearing-impaired infants, children, and youth.

7.3.1(d) Disorders of language development.

7.3.1(e) Commonly used methods and procedures of language instruction for hearing-impaired children and youth.

7.3.1(f) Techniques for utilizing appropriate instructional procedures to effect language learning in hearing-impaired students and for diagnosing, correcting, and improving language.

7.3.2 Communication

7.3.2(a) Communication processes and the effects of hearing loss on communication.

7.3.2(b) Research and other literature on communication of the hearing impaired.

7.3.2(c) Various modes of communication (e.g., reading, writing, speechreading, auditory perception, speech, fingerspelling, sign language) used in teaching hearing-impaired individuals; methods, procedures, and materials used in teaching these modes of communication, including the use of techniques and materials appropriate to individuals or groups in the development, diagnosis, correction, and improvement of communication.

7.3.3 Reading

7.3.3(a) Methods of teaching reading in general education.

7.3.3(b) Special assessment and instructional procedures for teaching reading to hearing-impaired students.

7.4 Curriculum and Instruction

7.4.1 The purpose and nature of curriculum and its relation to learning and instructional processes.

7.4.2 Curriculum and instructional procedures common to education of the hearing impaired and regular education; adaptations of regular curriculum and instructional procedures for the hearing impaired; and aspects of curriculum and instruction unique to education of the hearing impaired.

7.4.3 Methods for planning, implementing, and evaluating learning experiences for individuals and groups in order to:

7.4.3(a) identify learner entry level;

7.4.3(b) conceptualize and formulate objectives in behavioral terms;

7.4.3(c) design methods of evaluation based upon measurable objectives and utilize data collection procedures;

7.4.3(d) select, design, produce, and utilize media, materials, and resources appropriate to learner behavior and lesson objectives;

7.4.3(e) implement appropriate instructional procedures; and

7.4.3(f) evaluate learner responses and revise instruction appropriately.

7.4.4 Use of diagnostic instruments in programs for the hearing impaired in order to:

7.4.4(a) interpret assessment and diagnostic information;

7.4.4(b) translate the diagnostic information into curriculum.

7.4.5 Current educational technology, such as computers and TDDs, applicable to the hearing impaired.

7.4.6 Behavior management techniques.

7.4.7 Methods of planning and organizing curriculum content in an area of specialization for effective learning by individuals and groups of hearing-impaired students.

7.5 Professional Development

7.5.1 Ethical behavior and the application of ethical standards in the education of the hearing impaired.

7.5.2 Effective use of paraprofessionals (teacher aides, volunteers, students, parents, and other assistants).

7.5.3 Methods of effective participation within a team of professionals.

7.5.4 Communication skills effective with other professionals, hearing-impaired children and youth, and parents of hearing-impaired students.

7.6 Practicum—Observation, participation, clinical practice, and student teaching to develop familiarity with:

7.6.1 facilities, services, and programs available for the education and counseling of hearing-impaired children and adults;

7.6.2 effective interaction strategies to use in learning situations with hearing-impaired individuals or groups at one or more teaching levels.

8.0 PROVISIONAL CERTIFICATION REQUIREMENTS FOR TEACHING SPECIALIZATIONS

As mentioned earlier, all professionals who work with hearing-impaired children must possess a general knowledge of the field as well as an area of specialization. The prerequisites for provisional certification are listed in 4.0. These prerequisites apply to all professionals no matter what their specializations. The requirements for provisional certification outlined in 5.0 and the competencies in 7.0 apply to all academic teaching personnel. The provisional level requirements for each area of specialization are summarized, and special requirements, when applicable, are outlined in the following sections.

8.1 Parent-Infant Education

In addition to the prerequisites and requirements for provisional level certification, the parent-infant educator needs specialized knowledge and skills in infant development, language acquisition, parent education, audiology, and psychosocial development. In order to ensure this knowledge, a minimum of 15 semester (20 quarter) hours of course work in addition to the prerequisites and the 30-hour core curriculum is required. The course work should include the following areas of knowlege and skills.

8.1.1 Infant Development

8.1.1(a) Sensori-motor development.

8.1.1(b) Language acquisition, with particular attention to the role of the parent and "motherese".

8.1.1(c) Social, emotional, and personality development in the first 3 years of life and the effect of the infant's environment upon growth.

8.1.1(d) Cognitive and perceptual development and the role of language in achievement.

8.1.1(e) Development of creativity in children.

8.1.2. Language

8.1.2(a) Acquisition and development of language from birth through the first 3 years of life.

8.1.2(b) Parent-infant interaction styles.

8.1.2(c) Linguistic and cognitive content of mother's language.

8.1.2(d) Linguistic experiences within the home.

8.1.2(e) Implications of linguistic theory.

8.1.2(f) Competency/performance distinction.

8.1.3 Parent Education

8.1.3(a) Family structure and relationship.

8.1.3(b) Principles of parent counseling.

8.1.3(c) Sibling relationships and peer relationships.

8.1.3(d) Group and individual facilitation methods.

8.1.3(e) Role of the parent-infant dyads.

8.1.3(f) Instructional strategies appropriate for adults (parents).

8.1.3(g) Parental techniques to optimize development of perception, cognition, and creativity.

8.1.4 Audiology

8.1.4(a) Implications of hearing impairment for language acquisition (i.e., phonologic rather than semantic).

8.1.4(b) Etiology and symptomatology of hearing loss.

8.1.4(c) Management of amplification for the infant.

8.1.4(d) Interpretation of testing results.

8.1.4(e) Techniques of stimulation and utilization of residual hearing.

8.1.4(f) Implications of additional handicapping conditions (e.g., visual, mental retardation, cardiac, motor, deprivation or neglect, orthopedic, etc.).

8.1.5 Psychosocial Development

8.1.5(a) Socioeconomic factors affecting the family.

8.1.5(b) Coping mechanisms of parents.

8.1.5(c) Grieving process of individuals within the family.

8.1.5(d) Effective behaviors to encourage infant learning.

8.1.5(e) Attitudinal demands of the culture.

8.1.5(f) Public policy and the implications for service delivery.

8.1.5(g) Available resources and mechanisms for coordination of services the infant might need (e.g., medical, audiological, psychological, educational).

8.1.5(h) Professional code of ethics that dictates the ability to handle confidential information.

8.2 Early Childhood Education

Applicants for certification with a specialization in early childhood education must complete:

8.2.1 The course work generally required for regular state credentials in early childhood education; and,

8.2.2 The prerequisites and core curriculum described under provisional certification (see 4.0 and 5.0).

8.3 Elementary Education

Applicants for certification with a specialization in elementary education must complete:

8.3.1 The course work generally required for regular state credentials in elementary education.

8.3.2 In addition, they must have completed the prerequisites and the core program described under provisional certification (see 4.0, 5.0).

8.4 Secondary Education

Applicants for certification with a specialization in secondary education complete:

8.4.1 The course work generally required for regular state credentials in secondary education.

8.4.2 Secondary teachers may teach academic subjects or special subjects. All secondary teachers must complete the prerequisites and the core program described under provisional certification (see 4.0, 5.0) in order to qualify for CED certification.

8.5 Education of Multihandicapped Hearing Impaired

Teachers of multihandicapped hearing-impaired children need additional preparation beyond the provisional level. In addition to the prerequisites and the core curriculum for provisional certification, these teachers must complete a minimum of 15 semester (20 quarter) hours of course work including the following areas.

8.5.1 Psychology and Implications of Multihandicapping Conditions

8.5.1(a) Social, medical, emotional, physical, and general characteristics of the MHHI child.

8.5.1(b) Implications of multihandicapping conditions in the educational setting (e.g., medical problems in the classroom, the home, and the community).

8.5.1(c) Methods of classifying, diagnosing, and teaching MHHI children from educational, medical, sociological, and psychological points of view.

8.5.1(d) Issues and trends affecting the education of MHHI children.

8.5.1(e) Historical developments in the education of the MHHI in a continuum of educational settings and educational delivery models.

8.5.1(f) Professional resources available for the provision of support services (public and private agencies and personnel) to MHHI children.

8.5.2 Individual Appraisal of the MHHI Evaluation

8.5.2(a) Purposes and nature of the appraisal (evaluation) process.

8.5.2(b) Diagnostic instruments (formal and informal) used with the MHHI.

8.5.2(c) Procedures for interpreting diagnostic information.

8.5.2(d) Methods of translating diagnostic information into individual programming.

8.5.2(e) Strategies for communicating diagnostic information to professionals, paraprofessionals, and parents.

8.5.2(f) Methods of keeping records of diagnostic information.

8.5.3 Curriculum and Instruction

8.5.3(a) Basic learning theory.

8.5.3(b) Design, development, and implementation of curriculum appropriate for MHHI children.

8.5.3(c) Task analysis and development of behavioral objectives for individualized instructional programs.

8.5.3(d) Instructional procedures and problems of teaching the MHHI in light of recent literature.

8.5.3(e) Pertinent curriculum adaptations for specific combinations of handicapping conditions in the individual MHHI child.

8.5.3(f) Diagnostic information for functional programming, implementation, and re-evaluation of individual instruction.

8.5.4 Language and Communication Skills

8.5.4(a) Familiarity with a variety of modes, techniques, and strategies to communicate with or elicit communication from MHHI children.

8.5.4(b) Normal child language acquisition and usage.

8.5.4(c) Nonverbal, preverbal, and verbal communication skill development as it relates to the nonverbal child.

8.5.4(d) Symbolic and nonsymbolic communication approaches and techniques and their implications in use with the MHHI.

8.5.4(e) Selection and implementation of appropriate communication strategies (verbal and augmentative).

8.5.4(f) Current and historical literature pertinent to language and communication development in the MHHI.

8.5.4(g) Implications of various handicapping conditions on language and communication (with and without hearing impairment).

8.5.5 Social/Emotional Skills

8.5.5(a) Social/emotional development of the normal child.

8.5.5(b) Abnormal psychosocial development.

8.5.5(c) Theoretical and practical applications of behavioral management techniques as they apply to management and control of behavior in the school and at home.

8.5.5(d) Implementation of social/emotional curricula and approaches.

8.5.6 Perceptual-Motor Skills

8.5.6(a) Perceptual-motor development of the normal child.

8.5.6(b) Implementation of perceptual-motor training techniques.

8.5.6(c) Current and historical literature pertinent to perceptual-motor development.

8.5.7 Professional and Management Skills

Many MHHI specialists will be responsible for supervising teacher aides and other paraprofessionals who work with MHHI children. MHHI specialists also work with parents and professionals in other disciplines.

8.5.7(a) Federal and state legislation pertinent to MHHI specifically and special education in general.

8.5.7(b) Program design models used for MHHI students.
8.5.7(c) Placement options available to MHHI students.
8.5.7(d) Acquisition of appropriate support services.
8.5.7(e) Interdisciplinary team management and effective team participation.
8.5.7(f) Professional report writing.
8.5.7(g) Medical problems in the classroom and their implications.
8.5.7(h) Support and counseling services for parents of MHHI children.
8.5.7(i) General administrative theory.

8.6 Vocational Education

8.6.1 Prerequisites for Basic Certification

8.6.1(a) The applicant must obtain the local/state vocational certificate to teach in the public schools of the state.
8.6.1(b) If there is no local/state certificate, the applicant must have the G.E.D. or a high school diploma; and 5 years of experience, including licensure, journeyman's status (if applicable), or other acceptable evidence of high level of competency where no license or credential is applicable.

8.6.2 Requirements for Basic Certification

8.6.2(a) The applicant must possess knowledge of the language problems of hearing-impaired students. This knowledge can be demonstrated by:
(1) a valid record of classroom observation in academic classes (total of 20 clock-hours, 10 hours each on two levels) verified by the vocational supervisor and the school head;
(2) a record of attendance at a series of lectures concerning language problems of the hearing impaired given by an academic staff member in the school; and evidence of practical application of the use of language in own trade verified by the vocational supervisor or school head;
(3) successful completion of an appropriate college course verified by a transcript with a course description.

8.6.2(b) The applicant must demonstrate by submission with the application of appropriate curriculum materials or documentation, techniques of teaching a vocational subject to hearing-impaired students. This can be done in one of the following ways:
(1) using curriculum and curriculum materials appropriate to the specific teaching area. This can be done in one of the following ways: making a videotape of an actual demonstration; developing a project or unit using slides, videotape, Super-8, transparencies, or other visual media; developing written materials (e.g., a series of worksheets) for students; or
(2) incorporating knowledge of related academic subjects into the course material for the specific vocational area; or
(3) participating in an inservice workshop and submitting statements from the supervisor or workshop instructor and school head; or
(4) doing an independent study relevant to education of the hearing impaired and submitting statements from supervisor and school head.

8.6.3 Requirements for Advanced Certification

8.6.3(a) The applicant must have completed 3 years or more of successful teaching experience with hearing-impaired students. This experience must be verified by written statements from the applicant's immediate supervisor and from the school head.
8.6.3(b) The applicant must possess knowledge of education of the hearing impaired, including current trends and practices, and knowledge of applicable state and national legislation. Such knowledge must be verified by:
(1) college transcript and catalog course description; or
(2) verification of attendance at an inservice workshop through written statements from the applicant, the applicant's immediate supervisor, the workshop instructor, and the school head; or
(3) verification of independent study of education of the hearing impaired through written statements from the applicant's immediate supervisor and from the school board.

8.6.3(c) The applicant must demonstrate satisfactory use of the communication methods used in the school where employed. This can be verified by written statements from the supervisor and school head.
8.6.3(d) The applicant must possess knowledge of the psychosocial aspects of deafness. This can be achieved by:
(1) taking appropriate college courses and submitting transcripts with course descriptions;
(2) observing and participating in a residence hall program or in a community social program for the hearing impaired (total of 20 clock-hours). This activity must be verified by a statement from the school head.

8.6.3(e) The applicant must participate in job placement of a hearing-impaired student. This can be verified by the department supervisor or school head.
8.6.3(f) The applicant must participate in the preparation of an IEP. This must be verified by the department supervisor and the school head.

8.6.4 Renewal of Advanced Certificate

The certificate for vocational teachers is valid for a period of 5 years from the date of issuance. The applicant for renewal must submit evidence of having met at least one of the following requirements.
8.6.4(a) Successfully completed a minimum of 3-semester-hours of course work in an area related to the applicant's general field of specialization.
8.6.4(b) Completed a minimum of 16 hours of recent observation, either in the classroom or on the job, in the applicant's vocational teaching area.
8.6.4(c) Completed a minimum of 40 hours of work experience (within the past 3 school years) in the applicant's vocational teaching area.
8.6.4(d) Published an article in a professional journal.

9.0 CERTIFICATION REQUIREMENTS FOR SUPERVISORS OF INSTRUCTION

All applicants for certification in the area of instructional supervision must fulfill the following requirements.

9.1 Provisional Certification

9.1.1 Hold a CED professional certificate as a teacher of hearing-impaired children and/or youth.
9.1.2 Qualify for and hold the credential for supervision in the state in which the applicant is employed, or, have completed a university program (minimum of 15 semester or 20 quarter hours) in instructional supervision. In order to ensure the acquisition of the knowledge and skills necessary for supervision, the course work must include the following areas:

9.1.2(a) Instructional Leadership Skills

(1) Curriculum development and implementation.
(2) Interpretation of assessment information and planning appropriate instructional change to meet student needs.
(3) Evaluation of curricula, instructional materials, and equipment appropriate for hearing-impaired individuals.

(4) Knowledge of various curriculum models and the selection of an appropriate model(s) to meet the needs of children, school, community, and culture.
(5) Strategies for involving parents in the educational program.

9.1.2(b) *Supervision Skills*
(1) Evaluation of teaching effectiveness.
(2) Effecting teacher improvement through counseling.
(3) Progressive discipline in the management of teacher performance.
(4) Interpretation of teacher contracts.
(5) Encouragement of innovative programming.
(6) Stimulation of professional growth in teachers.
(7) Utilization of various support service personnel.
(8) Development of the ability to use information and reports essential for appropriate case management of hearing-impaired students.

9.1.2(c) *Interpersonal Skills*
(1) Development of positive working relationships with teachers and among teachers.
(2) Establishment of positive relationships with children and the use of appropriate behavior management.
(3) Assistance to parents in understanding the educational needs of students and the provision of parent counseling/education.
(4) Establishment and maintenance of positive relationships with private and public agencies.

9.1.2(d) *Governmental/Legal Skills*
(1) Knowledge of current local, state, and federal laws and regulations relevant to hearing-impaired children.
(2) Knowledge of due process and fair hearings.
(3) Knowledge of general school law.
(4) Knowledge of labor law.

9.2 Professional Certification

The applicant may receive professional certification after completion of 3 years of successful experience as a supervisor of instruction in a program for hearing-impaired children and/or youth. This must be verified by the employer at the place of employment.

9.3 Renewal of the Professional Certificate

The professional certificate in instructional supervision may be renewed for a period of 5 years by fulfilling any two of the requirements listed in 3.2. Those applicants wishing to keep in effect the professional certificate as a teacher and the certificate as a supervisor of instruction may use the same requirements for renewal of both certificates.

10.0 CERTIFICATION REQUIREMENTS FOR PSYCHOLOGISTS

10.1 Provisional Certification

10.1.1 Academic Preparation

The applicant must have earned a master's (or higher) degree from one of the following types of programs:

10.1.1(a) an NCATE- or APA-accredited program in one of the service branches of psychology (school, clinical, counseling, or educational);
10.1.1(b) a department of psychology of an accredited university;
10.1.1(c) an accredited consortium program of study in psychology and psychological practices with hearing-impaired clientele.

10.1.2 Licensure, Certification, or Credential Requirement

The applicant must hold either one of the following:

10.1.2(a) an entry level of state certification as a school psychologist;
10.1.2(b) a state license as a psychologist.

10.1.3 Communication Competency

Psychologists are expected to be able to communicate with deaf individuals. They must have competency in the use of both oral and manual communication skills. To ensure this knowledge, applicants must fulfill one of the following requirements:

10.1.3(a) successfully complete manual communication courses (college or equivalent, minimum of two semester hours);
10.1.3(b) be a deaf graduate of a postsecondary institution that uses total communication;
10.1.3(c) have 3 years of experience teaching hearing-impaired children or working in a residence hall with hearing-impaired children where manual communication is used;
10.1.3(d) show competency in manual and oral communication skills and verify by submitting a written statement from the employer;
10.1.3(e) hold an RID Interpreter Certificate.

10.1.4 Foundations

The applicant must have satisfactorily completed a minimum of 9 semester hours of course work in the following areas:

10.1.4(a) psychological and social aspects of deafness;
10.1.4(b) acquisition and development of language skills in hearing and hearing-impaired infants, children, and youth;
10.1.4(c) aural rehabilitation, including audiological aspects of deafness.

10.1.5 Evaluation Techniques (Educational Psychologist)

The applicant must show successful completion of one of the following:

10.1.5(a) courses (minimum of 3 semester hours) to provide knowledge and skill in the selection, administration, and interpretation of psychological tests for hearing-impaired children;
10.1.5(b) 3 years of full-time experience as a psychologist responsible for selecting, administering, and interpreting psychological tests with hearing-impaired children, as verified by a written statement from the employer.

10.1.6 Evaluation Techniques (Clinical Psychologist)

The applicant must show successful completion of one of the following:

10.1.6(a) courses (minimum of 3 semester hours) to provide knowledge and skill in the psychological treatment of hearing-impaired children;
10.1.6(b) 3 years of full-time experience in the field of psychological treatment of hearing-impaired children.

10.2 Requirements for Professional Certification

The applicant may receive professional certification after completing 3 years of successful work as a psychologist working with hearing-impaired children at the provisional certification level. This must be verified by the employer at the place of employment.

10.2.1 Academic Preparation—The academic preparation requirements for professional certification are the same as the requirements for provisional certification.

10.2.2 Licensure, Certification, or Credential Requirement

The applicant must hold either one of the following:

10.2.2(a) the highest level state credential as a school psychologist in the state where employed;
10.2.2(b) the highest level state license as a psychologist.

10.2.3 Communication Competency—The applicant must possess communication skills sufficient to permit the interaction required to conduct basic counseling and therapy and to administer all psychological tests to individuals and groups of severely impaired children. These skills can be demonstrated by:

10.2.3(a) obtaining an interpreter's certificate from RID;
10.2.3(b) presenting a letter of competence from the director of a communication skills program verifying the applicant's satisfactory completion of a sequence of courses.

10.2.4 Techniques and Methods of Implementing Testing Results (Educational Psychologist)

The applicant must show successful completion of one of the following requirements:

10.2.4(a) 3 years of experience as a psychologist working in an educational setting with hearing-impaired children. This experience should include interpreting test and other assessment information for the purpose of developing appropriate educational strategies for implementing prescriptive teaching. The applicant must submit a letter verifying the experience from the employer;

10.2.4(b) 6 semester hours of course work in the education of multihandicapped hearing-impaired children.

10.2.5 Techniques and Methods of Treatment (Child Psychologist)

The applicant must show successful completion of one of the following requirements:

10.2.5(a) 3 years of experience as a psychologist working with hearing-impaired individuals plus at least a one-semester internship and practicum under the supervision of a qualified psychologist experienced in working with hearing-impaired people and their families;

10.2.5(b) 6 semester hours of psychological counseling; parent counseling; and family, individual, and group therapy.

10.3 Renewal of the Professional Certificate

The professional certificate for psychologists may be renewed for a period of 5 years by fulfilling any two of the requirements listed in 3.2.

11.0 PROGRAM APPROVAL

The Council on Education of the Deaf grants certificates of recognition to programs based on an evaluation of program resources, curriculum, personnel, and practicum facilities. Invitations for program evaluation or re-evaluation may be initiated by a college or university, a department within a college or university, or a program for the hearing impaired that is directly affiliated with and supervised by an accredited institution of higher education (see Standards of Evaluation of Programs, CED #1).

12.0 IMPLEMENTATION OF STANDARDS

The standards of CED certification of teachers of hearing-impaired students shall become effective 2 years from the date of adoption by the Executive Board of the Council on Education of the Deaf.

APPENDIX E

Credentials, Requirements, and Programs for Providers of Services

(As of June, 1986)

This appendix presents information about credentials, requirements, and programs for providers of services to the hearing impaired. This information concerns the clinical rehabilitative services credential, specialist instruction credentials, and credential for adapted physical education. The source of this material is the California Commission on Teacher Credentialing.

Clinical Rehabilitative Services Credential

Education Code Section 44268 describes the requirements and authorizations for this credential:

> 44268. Services credential with specialization in clinical or rehabilitative services. The minimum requirements for a services credential in a specialization in clinical or rehabilitative services are:
>
> (a) A baccalaureate degree or higher from an institution approved by the Commission.
> (b) A fifth year, or its equivalent, of college or university education.
> (c) Such specialized and professional preparation as the Commission may require.
>
> The services credential with a specialization in clinical or rehabilitative services shall authorize the holder to perform, at all grade levels, the service approved by the Commission as designated on the credential. Clinical or rehabilitative services that may be designated by the Commission include, but need not be limited to, speech, language, and hearing services.

The following authorizations may be listed on the document:

1. Language, speech, and hearing
2. Audiology
3. Language, speech, hearing, and audiology
4. Orientation and mobility
5. Language, speech, and hearing, including special class authorization (to teach classes of aphasic children)

Requirements

Applicants who completed a program of professional preparation in a California college or university must receive the recommendation of a California college or university with a Commission-approved clinical rehabilitative services program.

Applicants prepared *outside California* should submit: (1) a completed application form and fee; (2) transcripts showing the completion of an organized fifth-year program in language, speech, and hearing which may have resulted in a master's or higher degree; (3) verification that the program met the certification requirements [for the candidate]

to serve as a speech and hearing therapist in the state in which it was completed; and (4) verification that the program included a clinical practice with school-age children. If the out-of-state preparation does not meet these requirements, the applicant should contact a California college or university with a Commission-approved program for a recommendation or advice about completing the requirements for the credential. See the list of approved programs on this page.

Basic Skills Requirement

Every applicant for a credential must verify passage of the *California Basic Educational Skills Test (CBEST).* For information about the test, contact California Basic Educational Skills Test, 1947 Center St., Berkeley, CA 94704; telephone 415-849-0950.

Special Class Authorization

The special class authorization (to teach classes of aphasic children) requires that the candidate complete coursework in aphasia and in the methods of teaching school subjects, in addition to the coursework for the language, speech, and hearing authorization.

Emergency Credential and Requirements

The emergency clinical rehabilitative services credential authorizes service as an itinerant speech clinician and/or service as the teacher in a class organized for students with severe language disorders. It is available *only* at the request of an employing school district, county superintendent of schools, or state agency. To apply, one must submit a completed application form and fee, verification of having passing *CBEST,* a statement of need from the employer, and verification that the requirements listed in the next paragraph have been met.

The following are the requirements for the clinical rehabilitative services credential:

Either possession of a valid California clinical rehabilitative services credential in language, speech, and hearing *or* a bachelor's degree from an accredited institution and completion of an organized program, taken at an accredited institution, of at least two full years (60 semester units) of coursework, including a minimum of 75 hours of supervised clinical practice with school-age children in the area of language, speech, and hearing—*plus* verification that the applicant has applied for entrance to the commission-approved clinical rehabilitative services program of a California college or university.

Specialist Instruction Credentials

The following specialist instruction credentials are available on the recommendation of a California institution having a Commission-approved program in the specialized area:

(a) Early childhood education
(b) Reading
(c) Mathematics
(d) Bilingual/crosscultural education
(e) Health science
(f) Agriculture
(g) Special education

The program classifications adapted under the area of special education are:

(1) Communication handicapped (including speech and hearing, deaf and severely hard-of-hearing, deaf-blind, aphasic, and severely oral language handicapped)
(2) Physically handicapped (including blind and partially seeing and orthopedically handicapped)[1]
(3) Learning handicapped (including learning disabilities, behavioral disorders, educationally retarded, and educable mentally retarded)
(4) Severely handicapped (including trainable mentally retarded, severely multiple handicapped, seriously emotionally disturbed, and autistic)
(5) Gifted
(6) Visually handicapped (includes the blind and partially seeing)[1]

[1]The specialist instruction credential in physically handicapped initially issued before January 1, 1981, includes the blind and partially seeing. The specialist in physically handicapped initially issued after January 1, 1981, does not include the blind and partially seeing.

Colleges and Universities in California with Approved Programs in Clinical Rehabilitative Services[1]

State colleges and universities	*LSH*	*AUD*	*SCA*	*O&M*
CSU Chico	x		x	
CSU Fresno	x			
CSU Fullerton	x		x	
CSU Long Beach	x	x	x	
CSU Los Angeles	x	x	x	x
CSU Northridge	x	x	x	
CSU Sacramento	x		x	
CSU Stanislaus	x		x	
Humboldt State University	x		x	
San Diego State University	x	x	x	
San Francisco State University	x	x	x	x
San Jose State University	x	x	x	
University of California, Santa Barbara	x	x	x	
Private Colleges and Universities				
Biola College	x			
Chapman College	x		x	
Loma Linda University	x			
University of La Verne	x		x	
University of Redlands	x		x	
University of San Francisco	x	x		
University of the Pacific	x		x	
Whittier College	x		x	

[1]Specialized areas are indicated by x.

Key:
LSH = Language, speech, and hearing.
AUD = Audiology.
SCA = Special class authorization.
O&M = Orientation and mobility.

Requirements

An applicant for a specialist instruction credential must verify:

(a) Possession of a valid California basic teaching credential requiring a baccalaureate degree and a program of professional preparation, including student teaching (The valid teaching credential may be a partial, preliminary, postponed, clear, or life document issued under present or prior regulations.)
(b) Passage of the *California Basic Educational Skills Test (CBEST)* (For information about the test, contact your California employer or California Basic Educational Skills Test, 1947 Center St., Berkeley, CA 94704; telephone 415-849-0950.)
(c) For the clear credential, a minimum of five years of preparation and the recommendation of a California institution with an approved program in the specialized area

Term

The term of a *clear* specialist instruction credential is determined by the expiration date of the basic teaching credential held, but may not exceed five calendar years.

Applicants Prepared Outside California

An applicant prepared in a state other than California who holds a basic California teaching credential and has completed a postgraduate year, including a full program of preparation in an area of special education, may be granted a credential on direct application to the Commission.

See page 46 for a listing of California institutions currently offering approved programs for specialist instruction credentials.

Adapted Physical Education Credential

California Administrative Code, Title 5, Education, Section 3632(c) reads as follows:

> Teachers initially employed after September 1, 1980, instructing remedial-adaptive physical education shall have a credential authorizing the teaching of physical education and specialized training in remedial-adaptive physical education as established by the Commission on Teacher Credentialing.

Requirements

The requirements for the adapted physical education credential are as follows:

(1) Hold a basic teaching credential which authorizes the teaching of physical education. The following credentials are acceptable: single subject in physical education, multiple subject, standard secondary with a major or minor in physical education, standard elementary with an academic major or a major or minor in physical education, standard early childhood, special secondary in physical education, general secondary, junior high school, general elementary, kindergarten-primary. A single subject with a supplementary authorization in physical education is not a valid basic.
(2) Complete specialized training in adapted physical education.
(3) Be recommended by a college or university with a Commission-approved adapted physical education program. As of the date of this publication, the following California colleges or universities have approved programs:

California Polytechnic State University, San Luis Obispo
California State College, Bakersfield
California State Polytechnic University, Pomona
California State University, Chico
Cailfornia State University, Fresno
California State University, Fullerton
California State University, Hayward
California State University, Long Beach
California State University, Los Angeles
California State University, Northridge
California State University, Sacramento
California State University, San Bernardino
Dominican College of San Rafael
Humboldt State University, Arcata
San Diego State University
San Francisco State University
San Jose State University
Sonoma State University
University of Redlands
University of Southern California
University of the Pacific

Fee

A $40 fee must be submitted with the credential application, unless the adapted physical education authorization is applied for on the same application as the basic teaching credential. If the two credentials are applied for at the same time, only one $40 fee is required.

Basic Skills

Every applicant for a new type of credential must verify passage of the *California Basic Educational Skills Test (CBEST).* For information about the test, contact your California employer or California Basic Educational Skills Test, 1947 Center St., Berkeley, CA 94704; telephone 415-849-0950.

Colleges and Universities in California with Approved Programs in Special Education

Specialized Areas (Indicated by x)

Campuses of The California State University System	*Learning handicapped*	*Severely handicapped*	*Gifted*	*Communication handicapped*	*Physically handicapped*	*Visually handicapped*
Cal Poly Pomona	x	x				
Cal Poly San Luis Obispo	x					
CSC Bakersfield	x					
CSU Chico	x	x		x		
CSU Dominguez Hills	x	x		x[1]		
CSU Fresno	x	x	x	x		
CSU Fullerton	x	x	x		x	
CSU Hayward	x	x				
CSU Long Beach	x	x	x	x		
CSU Los Angeles	x	x	x	x	x	
CSU Northridge	x	x	x	x	x	
CSU Sacramento	x	x				
CSU San Bernardino	x	x				
CSU Stanislaus	x			x		
Humboldt State University	x					
San Diego State University	x	x	x	x	x	x
San Francisco State University	x[2]	x		x	x	x
San Jose State University	x	x	x	x		
Sonoma State University	x	x				
Campuses of the University of California						
UC Berkeley	x[3]	x[3]				
UC Irvine	x	x			x	
UC Los Angeles	x[2]	x[2,3]				
UC Riverside	x[2]	x				
UC Santa Barbara	x	x				
Private Colleges and Universities						
Azusa Pacific University	x					
California Lutheran College	x[2,3]	x[2]				
Center for Early Education	x					
Chapman College	x[2]		x			
College of Notre Dame	x					
Dominican College	x	x				
Fresno Pacific College	x	x				
Holy Names College	x					
Loyola-Marymount University	x					
Mount St. Mary's College	x					
National University	x					
Pacific Oaks College	x	x				
Pepperdine University	x[2]					
St. Mary's College	x	x				
University of La Verne	x			x		
University of Redlands	x					
University of San Diego	x	x		x[4]	x	
University of San Francisco	x[2]					
University of Santa Clara	x		x			
University of Southern California	x	x		x		
University of the Pacific	x	x				

[1]Exploratory program restricted to aphasic (five-year preliminary).
[2]Off-campus program available.
[3]Experimental program.
[4]Pt. Loma.

APPENDIX F

Recommendations for Classroom Acoustics

The topic of classroom acoustics is generally neglected in the design and construction of the school classroom. Many acoustic problems may be related to the educational development of the hearing impaired and normal child. Studies have shown that noise can affect a student's reading and language development, speech intelligibility, behavior, and attention span, and cause fatigue, tension, and stress. Certain frequencies, if not controlled, can cause dizziness, blurred vision, nausea, and other physical symptoms.[1] (Refer to the references at the end of this appendix.)

Considerations for Classrooms

Some considerations for the structure of classrooms to meet optimum acoustic standards are listed as follows:

- Classrooms should be situated away from the street and playground noise.
- Classrooms should be situated away from the room containing electrical equipment and from transformers.
- Air conditioning (A/C) vents should be baffled or split to reduce noise caused by the air, and the A/C compressors should be mounted on rubber pads and separated from the main building.
- Self-contained classrooms are generally better environments for acoustics than are open classrooms.
- Classrooms should have carpeted floors, acoustic ceiling tiles, rubber seal around doors, remote starter ballasts, drapes where necessary, and angled room corners. Walls should not be hard surfaced.

An audiologist should be involved in the modification of a classroom to meet desired acoustic criteria. Generally, it is much easier and less costly to build a room correctly than to change the room after its construction has been completed.

Acoustics Terminology

Many complicated and technical measurements and terms are used in discussions of room acoustics and classroom specifications. Some of the more common ones are listed and defined below. The criteria levels listed are compiled from several references and are not easily found in one source:

- *Noise Criterion Level (NCL)*—An average level of noise with more restrictions on the high frequencies

[1] *Audiological Services in the Schools.* Edited by Frederick E. Garbee. Costa Mesa, Calif.: Office of the Orange County Superintendent of Schools, 1979. Used with permission from the Office of the Orange County Superintendent of Schools.

than on the low frequencies. An NCL of 25 to 30 is recommended by Smith (1970) and Doelle (1972). This number is about the same as a 35 to 40 decibels, adjusted (dba) for an empty quiet classroom with A/C and lights on (Niemoeller, 1968).

- *Signal-to-Noise Ratio (S/N)*—The difference between the speech signal and the noise within the classroom. An S/N of +10 or better should be maintained while the room is occupied (Newby, 1979).
- *Reverberation Time (R/T)*—The amount of time (in seconds) that it takes for a loud noise to decrease 60 decibels. R/Ts will vary with room volume, but recommended times are normal hearing child, .9 second or less; hard of hearing, .4 second in a small room; and hard of hearing, .7 second in a large room (John, 1972, and Niemoeller, 1968).
- *Octave Band Measurement*—A measurement of the amount of noise present at a specific frequency, such as 500 or 2, 000 Hz.

It is recommended that intrusive noise not exceed 50 dba in the classroom with the doors and windows closed and the room empty and quiet.

A minimal speaker-to-listener distance can be maintained by having individuals work in small groups less than nine feet (2.7m) apart. (The optimal vocal distance is less than three feet [1.9 m], which can be obtained with an FM transmitter, according to Ross and Giolas, 1972.)

Some helpful references are:

Doelle, Leslie L. *Environmental Acoustics.* New York: McGraw-Hill Book Co., 1972.

John, J.E.J. "The Efficiency of Hearing Aids as a Function of Architectural Acoustics," in *The Modern Educational Treatment of Deafness.* Edited by A.W.G. Ewing. Manchester, England: Manchester University Press, 1960.

Newby, Hayes A. "Industrial Audiology," in *Audiology* (Fourth edition). Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1979.

Niemoeller, A.F. "Acoustical Design of Classrooms for the Deaf," *American Annuals for the Deaf,* Vol. 113, (November, 1968) 1040—45.

Ross, M., and T. Giolas. "The Effect of Three Classroom Listening Conditions on Speech Intelligibility." Paper presented at ASHA Convention, Chicago, 1969.

Sanders, D. A. "Noise Conditions in Normal School Classrooms," *Exceptional Child,* Vol. 31, (March, 1965), 344—54.

School Sound Level Study. Sacramento: California State Department of Education, 1986.

Smith, B.J. *Acoustics.* New York: American Elsevier Publishing Company, Inc., 1970.

APPENDIX G

Statewide Directory of Services for Individuals with a Hearing Impairment

This directory contains a listing of organizations throughout California that provide services to the hearing impaired.[1] In addition to this listing, the Special Education Division of the California State Department of Education prepared the *Directory of Services for Children with Visual, Hearing, and Severe Orthopedic Handicaps.*[2] To assist clients within a certain region, staff members of local programs are advised to develop a directory of community services available in their area.

Bay Area Center for Law and the Deaf
Deaf Counseling, Advocacy and Referral Agency
125 Parrott St.
San Leandro 94577
(415) 895-2450 Voice or TDD

California Association of the Deaf
2631 Capitol Ave.
P.O. Box 160302
Sacramento 95816
(916) 428-5218 Voice
(916) 446-4463 TDD

California Association of the Physically Handicapped
1617 East Saginaw, Suite 109
Fresno 93704
(209) 222-2274 Voice
(209) 237-5762 TDD

California School for the Deaf
Northern California
39350 Gallaudet Dr.
Fremont 94536
(415) 794-3800

California School for the Deaf
Southern California
3044 Horace St.
Riverside 92506
(714) 683-8140

California State Department of Education
Special Education Division
721 Capitol Mall
P.O. Box 944272
Sacramento 94244-2720
(916) 323-4768

[1]The telephone numbers and addresses of the organizations listed in this directory were current when this publication was developed.

[2]*Directory of Services for Children with Visual, Hearing, and Severe Orthopedic Handicaps.* Sacramento: California State Department of Education, 1984. Copies of this publication may be obtained from the Special Education Division, California State Department of Education, P.O. Box 944272, Sacramento, CA 94244-2720.

California State Department of Education
Special Education Division
Consultant Services South
601 W. 5th St., Suite 1014
Los Angeles 90017
(213) 620-2050

California State Department of Rehabilitation
Services for Deaf Persons
830 K St. Mall
Sacramento 95814
(916) 445-3031 Voice or TDD

Catholic Social Services
2869 Bush St.
San Francisco 94115
(415) 567-9855 Voice or TDD

Center for Communicative Development
1819 W. 6th St., Suite 100
Los Angeles 90056
(213) 483-0943 Voice or TDD

Center for Independent Living
2539 Telegraph Ave.
Berkeley 94704
(415) 841-4776 Voice or TDD

Center on Deafness
University of California
1474 5th Ave.
San Francisco 94143
(415) 731-9150 Voice or TDD

Dayle McIntosh Center
Deaf Services Section
8100 Garden Grove Blvd., #12
Garden Grove 92644
(714) 898-9571 Voice
(714) 892-7070 TDD

Deaf Community Services of San Diego
3788 Park Blvd.
San Diego 92103
(619) 692-0932 Voice or TDD

Deaf Counseling, Advocacy, and Referral Agency (DCARA)
125 Parrott St.
San Leandro 94577
(415) 895-2450 Voice or TDD

Deaf Self-Help
2891 Bush St.
San Francisco 94115
(415) 567-0439 Voice or TDD

Gallaudet College Press
Distribution Office
7th & Florida Ave., N.E.
Washington, DC 20002

Greater Los Angeles Council on Deafness
616 S. Westmoreland Ave.
Los Angeles 90005
(213) 383-2220 Voice or TDD

Hearing Society for the Bay Area
1428 Bush St.
San Francisco 94102
(415) 775-5700 Voice or TDD

Independent Living Center
2231 E. Garvey Ave.
West Covina 91790
(213) 332-1800 Voice
(213) 966-8115 TDD

Independent Living Resources Center
202 B Canon Perdido
Santa Barbara 93101
(805) 963-0595 Voice or TDD

Mental Health Services for the Deaf
St. John's Hospital
1328 22nd St.
Santa Monica 90404
(213) 829-7451 Voice or TDD

Mission Mental Health
761 S. Van Ness Ave.
San Francisco 94110
(415) 558-5671 Voice or TDD

National Center on Deafness
California State University Northridge
18111 Nordhoff St.
Northridge 91330
(818) 885-2121

NorCal Center on Deafness
2400 Glendale Ln., Suite F
Sacramento 95825
(916) 486-8570 Voice or TDD

Resources for Independent Living, Inc.
1230 H St.
Sacramento 95814
(916) 446-3074
TTY 446-3070

St. Benedict Center
2891 Bush St.
San Francisco 94115
(415) 567-9855 Voice or TDD

Self-Actualization Institute for the Deaf (SAID)
5037 W. Pico Blvd.
Los Angeles 90019-3796
(213) 931-1291 Voice or TDD

Tri Pod
955 N. Alfred St.
Los Angeles 90069
(213) 656-4904
(800) 352-8888 (National)
(800) 346-8888 (California)

Glossary

The purpose of this glossary is to define terminology used by those working with the hearing impaired that may be unfamiliar to some readers of this publication.[1] These terms apply to equipment, kinds and nature of hearing impairments, specialists who treat the hearing impaired, and means of communication.

Acoustics. The qualities of a room, hall, auditorium, and so forth that determine how well sounds can be heard.

Audiogram. A graphic record of an individual's acuity of hearing, as measured by an audiometer, showing for each ear and at different tone frequencies, the hearing loss in decibels or units of hearing loss from which the sensitivity for hearing may be calculated.

Audiologist. Specialist in the nonmedical evaluation, habilitation, and rehabilitation of those language, speech, and hearing disorders (communicative disorders) which center, in whole or in part, in the hearing mechanism. This individual is professionally trained to administer and interpret hearing evaluations.

Audiology. The science of hearing, particularly the function of the hearing mechanism.

Audiometer. The precision electronic instrument for measuring hearing acuity.

Auditory training. Special techniques that are used by educators of hearing impaired students or other trained professionals, in order to assist hearing impaired students with the identification and understanding of meaningful auditory patterns and qualities of sound. The child learns or relearns to use any remnant of residual hearing. Amplification via group and/or individual hearing aids usually assists in this habilitation process.

Auditory training unit. Specially designed electronic equipment for the hearing impaired. It amplifies speech and other sounds using a microphone/transmitter, via an FM (radio frequency band) or hard wire electrical system that connects to receivers and hearing aid earphones for auditory reception of sound signals or messages. It provides greater amplification than does a student's individual hearing aid and channels sound more directly to the student.

Calibration. Determination or rectification of the scale of measurement electrically generated by an audiometer.

Clarity. How clear sounds are heard and interpreted by the listener.

Conductive hearing loss. A hearing loss characterized by damage or obstruction of the auditory canal, tympanic membrane (eardrum), or ossicular chain (ear bones in the middle ear). This particular kind of ear pathology can

[1]The source for the majority of the terms in this glossary is *Hearing Impaired Manual: Recommended Procedures and Practices.* Springfield, Ill.: Department of Specialized Educational Services, Illinois State Board of Education, 1980, pp. 62—74. Used with permission from the Illinois State Board of Education.

often be treated, with good prognosis, by antibiotics or surgery.

Congenital. Present at birth.

Cued speech. A phonetically based communication system that employs eight hand configurations and four placement locations supplementing the visual manifestations of spoken language, clarifying language at the levels of syllables, words, and sentences.

Deaf. Those in whom the sense of hearing is nonfunctional for the purpose of ordinary communication by means of hearing with or without amplification.

Deaf studies. Studies of successful hearing-impaired adults.

Deafened. Adventitious onset of deafness.

Decibel (db). Unit for measuring the loudness of sounds.

Designated instruction and services (DIS). The services a child may receive, as specified in the individualized education program; for example, language and speech development and audiological services.

Fingerspelling. Method of communicating by means of the manual alphabet (words spelled out on the fingers).

Frequency (Hz—Hertz). The number of vibrations or cycles per second of a sound wave.

Hard of hearing. Those in whom the sense of hearing, although defective, is functional to some degree with or without a hearing aid, for the purposes of language acquisition and communication.

Hearing. Commonly (but not adequately) defined as the perception of sound. For diagnostic purposes, a distinction must be made between the function of the end-organ (ears) in receiving, analyzing, and transmitting and the function of the cortex in meaningful sound-symbol association. Consequently, it is useful to define hearing as the function of the auditory end-organ, including the radial fibers of the eighth nerve system in the "auditory cortex."

Hearing impaired. A term used to refer to persons who suffer a loss of hearing whether it be mild, moderate, severe, or profound; to include those sometimes referred to as hard of hearing, partially hearing, deaf, or deafened.

Hearing screening. A group or individual test of hearing through which children may be selected for further study and audiometric testing.

Individualized education program (IEP). A written plan for an individual with exceptional needs that is developed and implemented in accordance with recommendations from the IEP team and that is designed to meet the assessed needs of the student.

Intensity. The strength of the vibrations of sound wave; measure of the quantity of sound energy.

Interpreter. A specially trained individual who either interprets (conveys a spoken message to a hearing impaired individual at the appropriate language ability level via sign language and fingerspelling) or translates (verbatim signing and fingerspelling of a spoken message).

Least restrictive environment. The environment that optimizes opportunities for communication and for social, emotional, and academic growth and development of the hearing impaired student.

Mainstreamed. Hearing-impaired students are integrated into regular classroom activities.

Manual communication. A generic term encompassing all manual/gestural methods of communication, including natural gestures, conceptually accurate signs, manually coded English, facial expressions, fingerspelling, and body language.

Otologist. Specialist in the medical and surgical diagnosis and treatment of the ear.

Portable impedance bridge. A tympanometer that tests the condition of the middle ear.

Primary language. The language other than English, or other mode of communication, the person first learned, or the language which is spoken in the person's home.

Receptive communication. Receiving (visually and/or auditorily) and understanding that which another person expresses.

Residual hearing. Hearing that remains which may be stimulated in order to assist the child in his or her educational development.

Resource specialist program (RSP). Provides specialized instruction and services for students who are assigned to the regular program for the majority of the school day.

Reverse interpret. Provide voice for the hearing impaired student.

SELPA. Special education local plan area responsible for ensuring the provision of a free appropriate public education to all individuals with exceptional needs who are being educated within the geographic region covered by the local plan.

Sensorineural hearing loss. A hearing impairment characterized by pathology in the inner ear (cochlea) or somewhere along the eighth cranial nerve and which cannot be corrected by surgery. Loss may be partial or complete. When it is partial, there is distortion of sound, making speech discrimination difficult even with a hearing aid.

Sign language. Natural or formal sign system through which units of thought can be communicated.

Speech audiometer. An audiometer that tests the hearing of speech rather than the auditory reception of pure tones. Speech for testing is produced in either of two ways, depending on the apparatus used; by speaking into a microphone or by electrical pickup from a phonograph record.

Speechreading. The process of understanding what is said by another person via facial movements; e.g., the facial muscles, the lips, tongue or jaw.

TDD. Telecommunications devices for the deaf; for example, devices that transmit the spoken word into symbols to be read.

Threshold. The audiometric level at which an individual first perceives sound.

Total communication. An educational approach that focuses on linguistic development and concomitant conceptual, academic, social and emotional development, using all available modes of communication, including manual communication, speech, audition, pictorial representation, and printed symbol.

Usher's syndrome. A genetic disorder characterized by severe aural/neural hearing loss and by retinitis pigmentosa, a progressive degeneration of the light receptor cells of the retina that may lead to impaired night vision and unusual clumping of the pigment cells of the retina, causing eventual blindness.

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